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science-philosophy of science

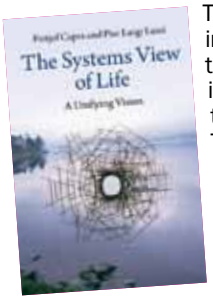
Hope in the Face of Complexity

Vasileios Basios

THE SYSTEMS VIEW OF LIFE: A UNIFYING VISION

Fritjof Capra and Pier-Luigi Luisi

Cambridge University Press, 2014, 510 pp., £25, h/b - ISBN-10: 110-7011-361



The first thing that bring in mind, to most of us, the name of Fritjof Capra is his first seminal work, the book entitled "The Tao of Physics". It was published in 1975 and I still remember the sheer excitement the title brought to us, young physicists at the time, and the trepidation it brought to our teachers. Then it came "The Turning Point", the "Belonging to the Universe" and the "Science of Leonardo" among many other titles authored by him. A prolific writer, Fritjof Capra joins forces with another eminent scientist, the biologist Pier Luigi Luisi, and together they bring a new book on system science and complexity. Pier Luigi Luisi is also well known for his involvement with the Mind and Life Institute as it is narrated in his book "Mind and Life: Discussions with the Dalai Lama on the Nature of Reality". Both authors are well versed in the "pairing the oldest wisdom traditions with cutting-edge scientific research". They are also pioneers along with Francisco Varela and Huberto Maturana of systems thinking in biology and ecology with their work and ideas touching on the social and economic problems that humanity faces in our times. Their recent book could not but talk about these issues.

In this hefty volume on the systems view of life the authors outline the horizon of modern systems thinking aiming at an audience of undergraduate students interested in understanding and getting to grips with the tenets of systems theory and its applications. Nevertheless, the book can serve as a great guide for the restless graduate student and the seasoned but still open and alert scholars who want to familiarise themselves with the fast growing science of complexity especially related with issues of the living. The book deals with living systems at all scales, from molecular aspects to social and societal ones passing from animal, ecological and cognitive systems. The overarching framework or paradigm, of course, being the systemic approach. The book is also of interest for the non-specialist who wants to understand what this "system thinking" can bring to contemporary thought.

The book succeeds in its task as its organisation and choice of paradigms are wisely arranged to lead the reader in encountering the daunting problems of today's state of the world from the perspective of systems science. Indeed it touches almost all of these problems - depletion of resources, climate change, ecological breakdown, the destruction of the fabric of social relations, health and healthcare shortcomings, spread of epidemics, globalisation and the degradation of economies to ruthless profit counting machines to name but a few...

The first chapters set the frame by an account of the history of science as conventionally taught but with some knowledgeable excursions to less discussed topics. The case of Leonardo da Vinci, herald of the Renaissance, is a good example of how biomimetics or biomimicry [from the Greek: βίος (bios), life, and μίμησις (mimesis), imitation] found their way to modern science. The same attitude, that is furnishing inspiration from nature, is one of the main strategies for the solution of complex problems. Da Vinci also developed the view of the Earth as living being, like the scientists of the Renaissance and Romantic eras. A far fetching and fertile idea that recently has resurfaced in system science as the Gaia hypothesis.

As is common, the book fails to mention the debt of da Vinci and modern science to the heritage of the Hellenistic era. It remains a forgotten topic but nowadays this is also resurfacing (see for example " by Lucio Russo). We know now that Hellenistic science and mathematics found their way, via da Vinci, to the founding fathers of the scientific revolution such as Leibniz and Newton; and the scientific method resurrected from Alexandria, alas without the resurrection of the world soul that was immolated along with Giordano Bruno and ended the Renaissance for good. The advent of Cartesian worldview led to the triumph of reductionist, mechanistic and mechanical thinking. A whole was considered to be explained by the motion of its parts. Systems science overcomes this Cartesian fallacy. The whole being more and different than its parts has become the spearheading banner of systems science and systems thinking.

An old mentor and teacher,of mine and of early system science, Ilya Prigogine used to say that *"...One of the most highly developed skills in contemporary Western civilisation is dissection: the split-up of problems into their smallest possible components. We are good at it. So good, we often forget to put the pieces back together again."* Indeed putting things back together to a coherent whole is the task of systems science. A task of immense complexity and this is the point where complexity science meets systems thinking. The nonlinear interconnections and the richness of the emerging dynamics cannot be ignored any more. Most of the problems in understanding, monitoring and predicting complex systems rest on this immense richness and complexity. That's where systemic thinking furnishes a novel understanding for hierarchies of wholeness. Moreover, this kind of thinking affords a renewal of the idea of entelechy or the formative cause so much ignored in the mechanistic approach. As Karl Ludwig von Bertalanffy, who is considered one of the founding fathers of general system theory puts it as early as 1929, *"What in the whole denotes a causal equilibrium process, appears for the part as a teleological event."*.

Early work and a lot of references to the origins of system science are nicely represented in the book. Moreover, an impressive, informative and inspiring collection of authoritative scholarly opinion in the form of "guest essays" presented by boxed insets within the book make it a valuable source of detailed information in a wide array of topics relevant to the subject. They are numerous and one cannot mention all of them, There is an essay by Patrick Bateson, for example, entitled *"The rise and rise of epigenetics"* another one entitled *"On the primary nature of consciousness"* by Michel Bithol also the ones with the titles *"Placebo and nocebo responces"* by Fabrizio Benedetti and *"Integrative practice in healthcare and healing"* by Helmut Milz; or the essay by Marjorie Kelly *"Living enterprise as the foundation of a generative economy"* and *"Seeds of life"* by Vandana Shiva, all

these and the ones I failed to mention due to space requirements but equally important pieces constitute an extra stimulus of high quality for the special interests of the reader.

The only baffling part of the book, for me, is the position of the authors with regard to consciousness studies and living systems. Although there is a good coverage of quantum biology and its recent advances and although there is an even more extensive discussion on cognition, awareness and neurophysiology, the authors declare their conviction that consciousness is an epiphenomenon. In other words that life comes first and then consciousness arises as an emergent phenomenon due to the complexity of the cognitive system. This is an honest and conventionally accepted view. But it is no more or less scientific than the other less accepted but more interesting point of view. Namely that life is a manifestation of consciousness. The view that consciousness is fundamental and that matter emanates as a derivative from it came back to existence in science with the birth of modern physics.

Early workers in quantum physics like Max Planck, Wolfgang Pauli, Ervin Schrödinger and Eugene Wigner, among others, expressed their conviction of a larger reality underlying the world of phenomena. One cannot fail to recognise the founder of quantum mechanics in its famous quote: *"All matter originates and exists only by virtue of a force... We must assume behind this force the existence of a conscious and intelligent Mind. This Mind is the matrix of all matter."* (Max Planck). For me it remains an enigma how the authors, both adepts in Buddhist philosophy and in perennial wisdom cannot read the message of quantum physics. Sir Roger Penrose and his ideas and work referring to the aboriginal nature of consciousness are duly referenced in the book, nevertheless they mention it only to declare it out of scientific bounds. Anyway, the fundamental basis of both complexity and quantum mechanics rests in the notion of possibilities rather than fixed object-like entities. These days a deeper understanding of systemic probability reaches out and meets quantum probability. But let us leave it there, as esoteric - but not obscure - as it might sound, and let us hope it will be treated in their next book, hopefully soon.

Stephen Hawking, on January 23, 2000, said in San Jose Mercury News: *"I think the next century will be the century of complexity"* and Stephen Hawking is manifestly optimistic. But from where can we draw optimism in the face of the complex issues that surround us? How can we make decisions when presented with an uncertain, complex evolution unfolding in front of us? In systems theory there is a theorem that says that to optimise something in the long term one has to optimise every next small step. That requires global information and local action. *"Think globally, act locally"* i.e. expand our awareness to a greater whole and focus on our part.

The whole book is intended among other things to be a call to assume our personal and collective responsibilities for the future. No matter how small or irrelevant the situation makes us think we are, it is the gravest of mistakes to think that doing something little changes nothing. Every little fluctuation, for any system at criticality, may result in determining its evolution at larger scales, larger than we can imagine or predict. Correlations ripple across the whole of the system when we are facing the onset of a bifurcation.

So, I would like to end this review exactly as the authors close their book, where they discuss the potential fate of our era as it fast approaches one of its major bifurcation points. They remark that the transition to a sustainable future will not be easy or given. This point of transition, characterised by systemic instability can lead to *"breakthroughs or breakdowns"*, as very pointedly put it. "*So what we can hope for the future of humanity?"* They ask, and they quote the great Czech playwright and statesman Václav Havel, who *"turned the same question to a meditation on hope itself"*:

"The kind of hope that I often think about … I understand above all as a state of mind, not a state of the world. Either we have hope within us or we don't; it is a dimension of the soul, and it's not essentially dependent on some particular observation of the world or an estimate of the situation … [Hope] is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out"

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Humanism and its Limits

Edward James

PROCESSES OF LIFE; ESSAYS IN THE PHILOSOPHY OF BIOLOGY

John Dupré

OUP, 2012, 350 pp. £35 h/b, £20 p/b – ISBN 978-0-19060198-2

This collection of papers summarises the experience of one of the leading philosophers of biology, John Dupré [1].

The sixteen originally separate papers aim to provide gentle entry points into various aspects of his work. We can provide here only a précis of some of the themes, and suggest some overall implications.

Dupré aims here to survey the great range of recent developments in biological studies that have entirely outmoded the usual views of journalists, commentators, and the general public in this area. And indeed, many of those who consider themselves to be scientists. He also challenges the common wider perception of 'Science' as a way of thinking fit to replace all others.

In order to make things clear, I have had to simplify and possibly exaggerate his disagreements with current views, which he presents in a much more courteous and gentle way.

I will first summarise the views that Dupré challenges by stating his position as I understand it in relation to each concept. I use the word delusion to point up his views.

The delusion of a unified 'science'

Science is not the one unified truth about the world but 'truth' from a particular perspective, answering a certain set of questions, often serving a particular set of interests.

Dupré prefers to to consider science as a non-unified collection of methods, each to be employed as a working hypotheses in a particular area of work.

The delusion of reductionism

Dupré produces a wealth of evidence to show that Biology cannot be explained by the procedures of Chemistry or Physics. For example, a particular microbe might become dangerous in one part of the human body while it may be essential to correct functioning in another part of the same body.

Reductionism would ignore all evidence such as this for non-scientific reasons. In any case, the foundational physics theory that many consider to be the bedrock of their belief has become confused in the conflict between believers in and questioners of quantum theory [2].

The delusion of natural laws

There are no such things as general laws that 'govern' reality. These 'laws' are simply limited models of a process, a 'rule of thumb' to aid thinking. Laws approximate to a reality that we

cannot take in in full detail. Such laws (simplifications) are not discovered but invented for particular purposes at particular times. The same simple model/law may be useful elsewhere at other times, so it comes to be relied on, believed in, told to other people, and becomes the truth itself. Scientific 'laws' are usually confused with man-made legal principles.

The delusion of separate genes

Many researchers and most of the public still believe that the unique DNA code of a particular human, their genome, specifies their future development in every detail. Scientists clump the DNA into separate short lengths that they call genes; each of which, they believe, defines some particular characteristic of that person. For example, some may even think that there is a gene for 'race'. Not so: race is defined by someone in power, it is a "reified residue of racism".

The delusion of separate organisms

Most of us probably have believed that each species of life is distinct. But there is no such thing as a discrete organism that can be defined and studied in isolation. We exist in symbiosis with a vast number of other life forms with which we are inextricably linked. We have not left them behind in our evolution into superior beings, but totally and continually rely on them for our continuing life[3]. No living cells exist in isolation, they are always part of a multi-cellular community.

All animals, including us, are composites of bacteria, archaea and higher forms of life. You could even define humans as the fermenters necessary to sustain their accompanying array of microbes.

Soil is the most complex assemblage of genomes, all of which are necessary to make possible the growth of the plants on which we all depend. The symbiosis between us, plants and soil removes the boundary between plant and non-plant.

The delusion of separation between life and non-life

What is life? Many say that viruses are not alive. But Lederburg [4] says that viruses are 'part of a whole organic life'. There is no unique way of separating out individuals. For example, problems for different life forms in our gut directly affect our digestion and therefore our overall 'health'. Life and non-life forms share a huge area that buffers and makes more complex any account of either. But it all depends on collaboration, not competition.

The delusion of a simple science of human development

Human development requires the confluence of many different resources. Present day living provides each individual with a custom-built niche, with essential support from items created by society. Can any recent child survive without a mobile phone?

The genome, the DNA belonging to a particular organism is not a 'Blueprint of life'. The genome is being altered by other local influences throughout the time it is being used to build the body. A raw genome on its own may be useful in Forensics, where we look for black or white answers, like finger-print matching, but not much otherwise.

Questions about Sociology and Evolutionary Psychology

We might think that Sociology should be about human nature, but E.O. Wilson [5] replaced it with Sociobiology and claimed that evolutionary biology would explain all. Then Sociobiology was rebranded as Evolutionary Psychology, which claimed that cognitive processes evolved about 10,000 years ago in the Stone Age, and have not developed since. There can be no evidence for this, we were not there. This theory and much current resulting work seems to be mired in NeoDarwinian concepts which are now discarded.

Signs of new life: newer ways of looking

Metagenomics is a new field of study, in which genetic material is recovered directly from samples in normal surroundings. Such work reveals that the vast majority of microbial biodiversity has been missed by conventional cultivation-based methods. The aim now is to get unbiased samples of all genes from all the members of the sampled community. The new method of enquiry is called the *Developmental Systems Perspective*. This recognises that much more than the passage of genes is needed to build a new generation. Susan Oyama provides the classic definition [6].

The study of epigenetics [7] is increasingly important. It stresses that the genome (DNA) present in an egg defines a future process rather than a static object. The genome is wound in complex shapes that change as the organism develops. The genome is not a blueprint, but it participates in the complex development process which produces the living thing.

There is a conflict between the need to reproduce accurately, and yet to remain viable in a changing environment. This all has to happen much faster than 'evolution' of DNA by random 'chance', whatever that may mean. So the DNA, together with so much other material passed on to our siblings may be modified by the current environment of the organism.

The idea of a particular species finding a ready-made niche in which to prosper undergoes heavy modification. As soon as any organism finds somewhere to prosper, it continually develops and improves that niche. And the niche modifies the occupant. For each human niche, cultural evolution becomes more and more important in maintaining that niche.

Implications for medicine

Each human may have a unique DNA lineage, but our development is continually modified by our environment until our death. Our original DNA may be specially significant in some analyses, but not in others.

Human responses to a drug will be highly dependent on the response of all microbial colonies in the gut. Yet 'evidence-based tests' on the efficacy of drugs continue to be done in vitro, isolated from those colonies. So such measurements may be reporting on less than 1% of our environment. See the NIH website for more up-to-date work [8].

Which department of medicine should deal with cancers? Is it really a mainly genetic disease, in the family, or more epigenetic? Can most cancers be linked to diet? Our accompanying microbes can respond far faster than our DNA to the unwanted proliferation of cancer cells. Maybe even viruses could help in cancer treatment.

Implications beyond biology

Dupré says that Science is primarily a social activity. It is essentially collaborative, involving many minds. So original research is a illusion, since it depends on all the previous learning of the individual from all previous knowledge they have encountered.

Social beliefs are embedded into Science. For example, you cannot discuss mental health without assuming how people ought to behave, which is itself an ethical and moral posture.

Any way of classifying natural objects is not discovered: the process of classification is designed to serve a human purpose.

There is much embedded value in Science. For example, the idea that the cost of living index measures 'inflation' objectively: it is actually a political weapon, with those in power choosing what prices to take into account in the calculation...

Conclusions for us all to consider

Dupré's work questions many of the more general concepts in science that are presently tacitly assumed by journalists and their public. He suggests that large tracts of science need to look to their root assumptions.

No clear cause of anything

We need to abandon the assumption of causal completeness everywhere. Things don't happen because of the universal reign of some imagined law. And now we need to consider downward causation, from complex life downwards and we cannot identify causes as merely neural states of the brain.

No such thing as human nature

This is human nature as a fixed quality of all humans. For each individual, development is a process starting with fertilisation and continuing to death, tracing a unique path through life, as also does every other organism. For humans, cultural changes are now far more important than DNA origination. For example: the possession of Y(male) chromosome, makes the likelihood of violent behaviour more than five times great than without (female). This is much more significant than any quoted

gene effect. But any suggested cause must be both sufficient and necessary. You can't demonstrate this in biology or in economics or sociology or any human activity.

Spiritual development

Although a fearless critic of outmoded biological theory, Dupré seems to have circumscribed his further development by declaring himself a Humanist. Currently, the various humanist groups seems similar to other rather old-fashioned religious societies, in that members claim a 'belief' in certain written statements. Dupré writes that humanists don't believe in God. I cannot imagine what this might mean to them. Certainly he seems to deny the possible existence of anything outside his understanding of Science. Others of his present colleagues [9] seem to have already moved beyond humanism, and his former collaborators at Stanford seem more tolerant towards new ideas [10].

In looking beyond the self-imposed limits of Humanism and other forms of Scientism, I would prefer to subscribe to Feyerabend [11] in his view that "anything goes"; that is, we should seriously keep in mind all new possibilities.

Note: Dupré uses the word *myth* to denote a story which is not testable in his version of Science, and therefore should be ignored. Others writers, including Mary Midgley [12], use myth to mean a story which we may choose to live by. I consider the whole of Science to be such a myth, though not a very attractive one.

A personal view

Over this discussion loom the pre-judgements implied in any use of language. For example Health: *good*, and Illness: *bad*. Microbes are *bad*, some cleaning products aim to kill them all. Social judgements are already built into our language. And how do we know what any particular word means to someone else?

But that is an altogether more serious journey.

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See http://www.nih.gov/news/health/may2013/nhgri-22.htm

9. See the Exeter meeting on Posthumanism at

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and the downloadable attachments of Andy Pickering and Michael Hauskeller on that page.

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Decoding the Notebooks of a Genius

David Lorimer

LEARNING FROM LEONARDO

Fritjof Capra

Berrett-Koehler, 2013, 380 pp., $29.95, h/b – ISBN 978-1-60994-989-1

This beautifully written and presented book is the sequel to *The Science of Leonardo*, published in 2007. Fritjof has steeped himself in the notebooks of Leonardo for the last few years, and the result is a fascinating synthesis of his scientific work. The first book provided an introduction to his life, personality and scientific method, while this book contains more in-depth discussion of the main branches of his scientific work in the light of 21st-century systems science, including fluid dynamics, geology, botany, mechanics, science of flight and anatomy. Many of these discoveries are virtually unknown to the general public, as Fritjof observes, and he provides an amazing chart detailing some forty inventions and the era when they were subsequently rediscovered, sometimes not until the 20th century. He also surmises that, if these notebooks had been published sooner, Leonardo might have been acknowledged as the inventor of modern science. What is of particular interest is the way that he connects insights across different disciplines – for instance from the flow of water to sap rising in plants and air moving over a bird's wing - which is the hallmark of a systems thinker. Leonardo was also fundamentally concerned to understand the nature of life and its processes, which he brilliantly conveys in his drawings. Fritjof contrasts science of living forms concerned with movement, change and transformation with the mechanical outlook of Galileo, Descartes and Newton.

At the beginning of the book, Fritjof discusses the nature of Leonardo's genius, commenting that the principal signs are 'his relentless curiosity, intellectual fearlessness, capacity for intense concentration, attention to detail, holistic memory, commitments to the empirical method, and pervasive systemic thinking.' He is always on the lookout for the pattern that connects. The main parts of the book cover form and transformation in the macrocosm, dealing with water, the living Earth and the growth of plants, followed by transformation in the human body, which begins with the human figure, and moving on to mechanics, dynamics, flight and life. His insights into the nature of fluid flow create a new branch of science and he correctly describes how vortices are formed. He also understood the fundamental nature of the spiral. Very unusually, he was aware of the length of geological time, not generally accepted until the 19th century, and he works his knowledge of geology into some of his most famous paintings such as the Virgin of the Rocks. He also demonstrated that marine fossils found in mountain rocks had been formed in oceanic environments where these organisms had lived in the distant past. His dynamic approach to plant growth resembles that of Goethe and is again profusely illustrated – Goethe also recommended drawing plants as a means of understanding their processes. He was also the first to realise the correspondence between the rings on a tree and its age while also arriving at a qualitative understanding of branching patterns, secondary growth, phototropism and the responses of trees to injury (p. 124).

The reader benefits enormously from Fritjof's extensive knowledge of the history of science and his own understanding as a systems thinker. Moving on now to the human body, it is fascinating to learn how crude were contemporary anatomical drawings and the enormous improvements made by Leonardo. Again, we have drawings of the hand, arms and leg muscles adding to extensive analysis, while not

neglecting the importance of beauty and proportion. Fritjof questions the mechanistic interpretation of Leonardo's work on mechanics and details many of his practical and engineering inventions. He covers the science of weights, fluids in equilibrium, forces and motion, the conservation of energy and Leonardo's work on falling bodies and ballistic trajectories. Here he demonstrates an extraordinary level of abstract thinking that make many of his scientific statements sound modern, even though his science was still rooted in Aristotle. We can also still admire the accuracy and beauty of his many anatomical drawings.

Although his work on the science of flight is predicated on the movement of birds, he still arrived at some new insights in the field, for instance that the compression of air under a bird's wing is critical to the generation of lift - Leonardo was in fact the first person to understand the mechanics of bird flight. Fritjof explains all this in great detail along with his various inventions. Another special area of study was the human heart, where Leonardo understood the function of the valves, but failed to arrive at the circulation of blood, which had to wait another hundred years for William Harvey. He was also the first to understand the nature of atherosclerosis through the dissection of the body of an old man and comparing it with veins from younger people. At the same time, he was able to describe cirrhosis of the liver and was the first to use the term capillary vessels. He also made quantitative observations of fetal growth, which had to wait until the 19th century for further progress.

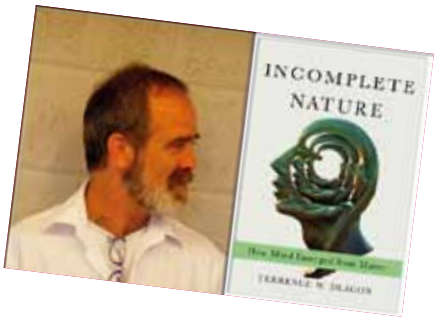
In his coda, Fritjof suggests that Leonardo's greatest legacy may be his systemic thinking along with his deep respect for nature and life. He believes that our great challenge is to build and nurture sustainable communities and that we can draw inspiration from the genius of Leonardo in acquiring ecoliteracy and redesigning our technologies and institutions. This brilliant book situates Leonardo not only in the history of science but also as the originator of systemic thinking so urgently required in responding to the complex challenges of our time. I am sure that other readers will be similarly astonished at the breadth and depth of Leonardo's thinking and the beauty of his drawings and designs illustrated in this book.

Emergence in Absentia

Martin Lockley

INCOMPLETE NATURE: HOW MIND EMERGED FROM MATTER by Terrence W. Deacon

W.W. Norton , 201 pp., $19.95, p/b - ISBN 978-0-393-34390-8



'Tis said that nature abhors a vacuum. But implicit in this phrase is that nature loves a vacuum and rushes in to fill it at the first opportunity. In this 'monster' of a book entitled *Incomplete Nature* Terrence Deacon, neuroscientist and anthropologist (Univ. California) makes compelling arguments for what he calls "absential" features: that is for the importance of what is missing or incomplete. He holds that "a causal role for absence appears to be absent from the natural sciences…[which are only] … interested in explaining things that are materially and energetically present." Moreover, he makes the case that absential features are particularly important in understanding emergence of life and mind (consciousness). As subjective meaning and value are absent (excluded) from the natural sciences, despite their importance in everyday life "our theories of how the world works…[have].. implicitly denied our very existence" causing distrust of science as an enemy of human values. [If I may jump ahead to use some of Deacon's reasoning, science has constrained itself by excluding values to such a degree that this very constraint is forcing the emergence of a new paradigm to compensate for what is missing. Nature abhors a vacuum! Incidentally the notion of emergent evolution can be traced back at least to the 1920s].

The reader should be warned that Deacon's 545 page exposition is aptly described, in one cover blurb, as "dense and breathtaking." Dense indeed, as the book enters into wide ranging and detailed chapters on Teleonomy, Emergence, Constraint, Homeodynamics, Morphodynamics, Teleodynamics, Autogenesis, (there is a glossary!!), and finally, but no less densely, Work, Information, Significance, Evolution, Self, Sentience and Consciousness. Excuse me while I do some breath taking!! But I do not imply any criticism of density, except perhaps my own in understanding such a dense oeuvre. Deacon is clearly a remarkable polymath who honours the tradition with an impressive grasp of the sciences and philosophy, respecting the best they have to offer while diplomatically pointing out their shortcomings and "incompleteness." Indeed it is in the gaps, in what is absent, that Deacon finds his most fruitful inspiration. [Leonard Cohen would say there are cracks "where the light gets in"].

Initially I thought that the subtitle "how mind emerged from matter," would signal an unduly scientistic, materialistic approach, but I was soon disabused of this presumption, by being led down many intriguing and counter-intuitive pathways. I realised that no matter (that word) how much one may pay lip service to mind-matter unity, most of us lazily incline to familiar, comfortable explanations, either wishing to explain the world materialistically (as matter) or to hold that "what matters" are the ineffable, magical, intangible forces that inspire awe and reverence, but not necessarily empirical understanding. In many ways Deacon's exposition is as comprehensive and compelling as a scientific exploration of mind-matter unity as one could hope to condense into 545 pages. The essential message is that life emerged from the inorganic realm, not by simple chemistry, or magically inexplicable creative forces but by potentially explicable physio-chemical processes that exercised "constraints" on the well-known forces of entropy (2nd law of thermodynamics) that dissipate everything to equilibrium (heat death) downhill or down the *orthograde* gradient.

On this topic he begins in familiar territory, criticising the "blind watchmaker, accidental robots, machine metaphor for organisms, noting that "design occurs spontaneously" by processes of growth and differentiation which requires us to look at teleology and what he calls "ententional" phenomena: i.e., phenomena that are incomplete and seeking completion in a new level of organisation. So matter can re-organise along a *contragrade,* uphill gradient because persistent perturbation, say a boiling hot spring in an otherwise cool ocean, forces a new level of organisation due to the absence of equilibrium, or a new type of equilibrium, not simply application of heat. "There are [he says] no material entities that are not processes, and because processes are defined by their organisation… organisation [may be] itself a fundamental determinant of physical causality." But organisation is not simply something added, or complexified, it is also restriction or constraint - the creation of a new habit. And we know that habits beget habits (constraints). Constraint is the fact of many possible constraints not being realised. It is just such constraints that drive processes in specific (non-

random, not dissipating) directions, allowing for new emergent phenomena. So perhaps we've been looking at things backwards.

Before the emergence of mind Deacon postulates Homeodynamics (simple 2nd law equilibrium) and Morphodynamics (a higher dynamic state capable of becoming "spontaneously more organized") leading to Teleodynamics (involving two or more strongly coupled morphodynamic processes that constrain each other, and through reciprocal synergy show end-directed organisation). Deacon's dense jargon is best alleviated by examples. So, picture biomolecules, reciprocally synthesised and dynamically maintained in a living cell so that they generate the whole (the cell), which in turn generates the molecules. The process is simultaneously bottom up and top down, leading to the emergence of a strong, new, balanced equilibrium. Moving from homeo- to morpho- and teleo-dynamic equilibrium is ratchet like, [and one might say progressive] in creating new levels of stable organisation.

Interestingly, though not mentioned by Deacon, Goethean science recognises the simultaneity of bottom up and top down biological dynamics, as well as using the term morphodynamics quite widely. In this sense it is ahead of its time in recognising the importance of intrinsic dynamics, as Deacon does from a slightly different perspective, rather than always resorting to the Darwinian notion that extrinsic selective factors (outside pressure) run the show. The new science of evo-devo is also becoming much more aware of these intrinsic dynamics. In short, the biological evidence demonstrates that organic processes are dynamic and so self -organising as to manifestly be constantly "falling towards" new levels of equilibrium. Although these are contragrade "uphill" dynamics, relative to the orthograde 2nd law, the dynamics ratchet "up" from one level of equilibrium to another in contragrade-orthograde cycles. The appropriate quote here is from one Stanley Salthe: "natural selection disposes what self-organisation proposes."

Addressing the so called hard problem of consciousness (explaining subjective experience) Deacon suggests we have framed questions wrongly when thinking in "mechanistic and computational terms " Consciousness is not "embodied in some material or energetic substrate." Computational mechanics don't map intentional properties of mentality, they only transfer extrinsic constraints from place to place, whereas cognition generates intrinsic constraints that propagate and self-organise. Brains are not wired point to point, but accommodate "noise" as a potential design feature, not a bug. Thus, hard problem features (subjectivity) are expected, emergent consequences of the aforementioned hierarchical dynamics. Deacon argues that sentience involves "self-preservation work" and sensitivity to extrinsic influences. Thus, "closure and autonomy …are the very essence of sentience." This closure also isolates sentience, helping create self-other distinctions, arrived at through the aforementioned ladder or ratchet of dissipative (ortho or downhill) and self -organising (contra or uphill) processes. These alternations between inertia and momentum create a dynamic feeling: i.e., emotion, and the psychic tension that separates self from non-self . But this "emotion" is not, according to Deacon, a mere energetic phenomenon like *Chi, Kundalini* or *Elan vital* that animates the body through physical forces. Mental experience is not like the "ebb and flow of some vital fluid." According to Gregory Bateson's claims, energetic processes are not the same as information processes, as the latter are *about* something. Here again information processes are, like other processes, characterised as a plateau arrived at by "dynamical ascent." Hierarchy exists in the evolutionary triune brain whose "hypothalamic, midbrain and brainstem circuits… play a critical role in regulating global body functions"…although at the same time most of these robust higher order functions do not "directly enter mental experience." [i.e., unconsciousness v. consciousness].

In the final analysis Deacon claims to have "broken the spell of dualism" by focusing on "what is present and what is absent," thus pointing the way to a "non-mystical account of the apparent non-materiality of consciousness." If we understand constraint we can stop searching for consciousness in the brain, or thinking it composed of neural signals. "We are what we are not: continually, intrinsically, necessarily incomplete by our very nature." "Self is literally…emerging each moment from what is not there….something coming out of nothing…newly embodied at each instant." [Quite a spiritual live-in-the-moment philosophy if I may say so]! As Deacon belatedly admits on p. 538 his subtitle is "slightly misleading. Mind did not exactly emerge from matter, but from constraints on matter." Once developed however, mind can constrain "all matter" of phenomena!

Ironically Deacon's exposition of "incomplete nature" has many parallels in theology. For example, so-called Irenaean theodicy proposes that creation is incomplete. Manifestly humans are not yet fully evolved, and experience evil and suffering in order to develop. If creation were perfect and finished, existence would pose no challenges or aspirations for growth or evolution. Humankind could neither have or perceive any relationship with a higher power, or "the other." While, Deacon has faith (perhaps the wrong word, despite his surname) in humankind's ability (or should I say special self- and other consciousness ability) to understand (partially understand) our relationship with the natural world, through the explanatory metaphors and hypotheses that science has so far proposed on the subject of energy and matter, he proposes we take further steps into the unknown. In his exposition, as yet difficult to understand in detail, he admits his hypotheses are incomplete, and is perhaps not as radical as it is provocative. Not radical because it proposes that we can explore the unknown with our present scientific tool kit, but provocative because he proposes, quite convincingly, that we need to rethink our mental tool kit and probe the "gaps," the cracks where the light gets in, not to find new matter or energy but to understand the value and potential of incompleteness, and how it influences and *reorganises* the tangible world and our cognition. Perhaps in this regard he has proved his point by initiating a paradigm shift, or at least opening the door to a conceptual reorganisation of our thinking about the incompleteness of the present scientific edifice, and, I might add, fundamentally rethinking what we mean by incompleteness, to give it a very different "meaning."

Deacon ends with a powerful epilogue. The message is that "the success of science appears to have dethroned the gods and left no foundation upon which unimpeachable values can rest." Thus "the current crisis of faith" is a reaction to … "a vision of reality that has no place for subjectivity or value…the specter of nihilism, to many, is more threatening than death." [Keep Calm]! "By rethinking the natural sciences in a way that has the metaphysical; sophistication to integrate the realm of absential phenomena as we experience them …we can chart an alternative route." [Carry on]! " There is more than stuff. There is how stuff is organised and related to other stuff. And there is more than what is actual. There is what could be, what should be, what can't be…"

At the risk of simplification, if we can't yet explain the origin of life and consciousness then simple logic suggests that something is missing from our understanding. Ironically Deacon attempts to address these missing factors, not by finding "missing stuff," but by celebrating the important influence of what is missing on what is not. He was, it seems, driven by the constraints of science to suggest we reorganise our scientific thinking.

As LaoTzu said:

"Clay is shaped into a vessel to enclose an emptiness that can be filled.

Doors and windows are cut into walls to provide access to their protection

… use comes from what is not there."

Cosmic Belonging

Martin Lockley

THE SELF CREATING UNIVERSE: THE MAKING OF A WORLDVIEW

John J. Clarke (SMN)

Xlibris, 2014, h/b $43.18, p/b, $27.18, ebook $ 6.38, ISBN 978-1-4836.8391-1

Life is full of little resonances and coincidences. One such for me was to find that *The Self-Creating Universe*, an excellent exposition by SMN member John Clarke, deals with exactly the same theme as another recent title, *Incomplete Nature*, by Terrence Deacon, reviewed above and referenced by Clarke (John). This theme, in a word, is "emergentism" dealing with emergence of novel, complex systems or entities which arise *de novo* and rather mysteriously from less complex antecedents. Such novelty-producing processes appear inherently creative, and by implication progressive (although progress may depend on your definition). In seventeen pages of citations I found almost 30 titles, mostly substantive books, containing direct reference to emergence or creativity. So we are evidently dealing with, dare I say it, an "emerging" new paradigm. Sticklers for historical accuracy may wish to point out that concepts of emergence are not new, a century old in fact, so we are really dealing with the "re- emergence of emergence."

Fundamental as they are, similarities between Deacon's book and John's end with the central theme and message, which is what John calls the "naturalist presumption." Simply put this position argues that supernatural explanations are not necessary to account for the emergence of mind from life, or life from inert inorganic matter. Otherwise the style and presentation of the two books are very different. John's exposition is pleasantly fluid and clear, whereas Deacon's is extremely dense, twice as long, jargon-filled, difficult to digest easily, and a little shy on addressing the metaphysical and spiritual implications which John discusses in his final chapters. This is not to denigrate Deacon's *opus* only to alert one not to expect a light read. Both authors hold that emergent novelties arise from entirely natural, if still-poorly-understood, processes and so do not require us to postulate an omniscient consciousness or creative power (mind) that somehow operates independently of matter. In short they reject such scenarios because they lead us into the trap of mind-matter dualism.

Just as Teilhard de Chardin and others began in the 20th century to apply the evolutionary paradigm to integrate cosmos (physiosphere), life (biosphere) and mind (noosphere) thereby evolving Darwinism into a more all-embracing evolutionary paradigm, so emergentism serves as a subtler, and more deeply integrated evolutionary hypothesis. Emergentism, then, is based *not* on the presumption that the extrinsic forces of a hostile world drive fierce competition, or even that the external influences of some mysterious divinity or omnipotent consciousness are at play. Rather, it speaks much more directly to recognising the upwelling (emergence) of intrinsic dynamics of life and mind that we intuitively know to be natural facets of our organic being. We are part of the natural cosmic-organic process (a cosmic belonging) and not somehow divided or separate from some part of it as our self-other consciousness might lead us to believe. In short this paradigm allows us to own and cherish our inner wisdom, whether physiological, psychological or spiritual as our own: to be at home with it and not borrowing or nervously grasping it from elsewhere. To paraphrase Stuart Kauffman, who John often quotes with approval, we begin to recognise God not as the creator outside the world but as the creativity within it. We in turn partake of this creative process, as we constantly come into being, and remain "at home in the Universe."

In a rather profound sense a deeper understanding of the ongoing creativity of emergent dynamics is driving, or at least heralding, a new humanistic reformation, a deeper self-realisation of what Teilhard recognised as our inner being, and what Jung recognised as the wisdom of individuation. Paradoxically this process is not about the separateness of individuality but about the wisdom of inner growth and awareness, which only separates us from the icons, idols and false images of the external world, not from the more satisfying, even happy sense of cosmic belonging, which is ultimately our individual and collective birthright. Our ability to individuate is only possible if our consciousness expands both inwardly and outwardly in our relationship with self and others. In short, this involves the evolutionary emergence of new psychological faculties and inner awareness, which in turn allows us to and be self-reflectively involved in the process. This then is a new species of transcendence of inner thresholds, as John aptly puts it "within the compass of nature." There is, he says no need to transcend nature altogether for some otherworldly realm. The kingdom of heaven is after all within you. [Here I am reminded of Mary Midgley's comments on those who envisage a science fiction future where humans use space ships to escape to some new planet once this one has been depleted of its resources. Her suggestion was to clean up our mindset (worldview) at home, a process that requires us to cherish, love and be at home in Earth space. Cosmic belonging begins at home!]

John leads us not just to intriguing expositions on how consciousness emerges naturally as life complexifies, especially at the human level, but he also make a compelling case that our moral and spiritual faculties naturally emerge with consciousness to foster what David Tacey calls " a new awareness of living in an enchanted spiritual universe." [It seems to me that this "major cultural shift" itself a creative process goes hand in hand with the self same creation and awareness of emergentism as an intuitively compelling new evolutionary paradigm, easily embraced by science philosophy and religion]. In short, by not dismissing spirit as some mysterious force in some other realm, we draw it to us and own it. In principle it is a ridiculously simple process of unifying our disparate physical and psychological (intellectual) faculties. We are offered a paradigm that integrates science and spirituality, not in a final fixed institution or creed but in a dynamic synergistic and symbiotic process. God, value, morality and purpose emerge out of mind, just as mind emerges out of nature.

The future involves tolerance of ambiguity, change and being part of a dynamic organic process involving our own conscious evolution, which in turn keeps our worldview in healthy flux. This does not require passive and fatalistic (lazy) acceptance of a process beyond our control. Rather, we can be active participants in celebrating and liberating the human spirit. The promise of emergentism, is that, like any knowledge properly appreciated, it offers a means to greater awareness that the human spirit arises "naturally" as part of the evolutionary process. Emergentism speaks compellingly to the unity of mind-matter dynamics and to the potential to integrate science and spirituality in a new paradigm, where we can return to our often divided world and know it anew, if not for the first time at least with a sense of cosmic belonging.

A Scientific Visionary

David Lorimer

GOD'S BIOLOGIST – a life of Alister Hardy

David Hay

Darton, Longman and Todd, 2011, 364 pp., £25, h/b – ISBN 978-0-232-52847-3

I met Sir Alister Hardy on a couple of occasions in the late 1970s and early 80s, once when I had come over from Cambridge to have lunch with him at Merton College. He was a highly engaging character, as is evident from this excellent biography by David Hay, who was director of the Religious Experience Research Unit for a few years from 1985. The overall purpose of the book is to

explore the link between Hardy's highly successful scientific career and his preoccupation with religion and spiritual experience. I remember him saying in a lecture at Manchester College that his father-in-law, Walter Garstang - also a Fellow of the Royal Society - had advised him to make his name in science before saying too much about his personal interest in religion. He broadly followed this advice, only creating the RERU after he retired in 1969.

Hardy was among the youngest to fight in the First World War, having been educated at Oundle and began his degree at Oxford under Julian Huxley. It is striking that, rather like Bede Griffiths, he had an early mystical experience in nature at around the same age of 16. Already in 1914, he was convinced that his mission, should he survive the war, was to bring about a reconciliation between evolutionary theory and the spiritual awareness of man. During the war, he did some special work on camouflage. He returned to Oxford and the Zoology Department and succeeded in obtaining a scholarship that took him to Naples, his first major field trip, which partly resulted from his finding a specimen of an extremely rare insect, much to the amazement of the interview panel. Hay writes of his boisterous charm, enthusiasm and meticulous scientific observation as hallmarks of his personality, to which he adds the ability to persist enthusiastically with a task.

His next major break was appointment to an expedition to the southern Antarctic on the Discovery. He had been working in Lowestoft, which marked the beginning of his career in marine biology, and he was already aware of the potential problems of overfishing brought about by improved technology and increased demand for fish. He was also working on his Continuous Plankton Recorder, which was one of his most significant scientific achievements. At the age of 31, he was appointed Professor of Zoology at the newly established University of Hull. From there he moved to Aberdeen as Regius Chair of Natural History in 1942, and then to Oxford in 1946, having become a Fellow of the Royal Society in 1940 and already being awarded an honorary degree from Oxford in 1938. He was clearly very popular with his students, and went out of his way to make sure of their welfare. Desmond Morris observes that he made his scientific reputation as a brilliant marine biologist, but he was at heart a wide-ranging Victorian naturalist, adding that, compared with Hardy's animated domain, other zoology departments seemed boringly clinical and unstimulating.

In 1949, he made his first public mention of taking telepathy seriously in a lecture to the British Association. This led eventually to his appointment as a Gifford Lecturer in Aberdeen in the early 1960s. Some readers will be familiar with this prestigious series of lectures held in the old Scottish universities, and dedicated to the exposition of natural religion. Hardy had been enormously influenced in his approach by William James, and these lectures enabled him to develop his ideas freely, especially as he had by then retired from Oxford. He spoke about behavioural selection as the way in which animals themselves play a major part in narrow evolution and was convinced by his own experience that we were capable of sensing the presence of transcendent reality. He applied an empirical approach to these studies, eventually calling for examples from the general public, which have been collated and analysed in different categories, forming the basis of the archive at the Alister Hardy Centre. The famous so-called Hardy Question is: "have you ever been aware of, or influenced by the presence or power, whether you call it God or not, that is different from your everyday self?" In spite of the complexities of phrasing, the responses were interesting and wide-ranging. During that time, he received a visit from John Templeton, which led eventually to the award of the Templeton Prize just before he died in 1985.

As a biologist, Hardy was interested in the biological basis of religious experience while realising that spiritual awareness belonged to the realm of tacit knowing and has evolved, in his view, by the process of natural selection. The last part of the book gives a history of what started as the Religious Experience Research Unit and an account of some of the challenges it has faced over the years. As far as I know, Hardy had no connection with the Network, although his outlook would have made him an ideal member, questioning as he did the limitations of scientific materialism and integrating science with spiritual awareness. David Hay has certainly done justice to Hardy's life and has written what will surely be the definitive biography for many years.

A Brave New World View

Chris Allen

QUANTUM CREATIVITY

Amit Goswami PhD

Hay House 2014, 240 pp., £10.99, p/b - ISBN: 978-1-78180-015-7. It is also available from Amazon as a downloadable e-book.

As a writer, when presented with this book, I was attracted by the prospect of gaining deeper insights into the mysterious creative process by which, in my case, the whole plot or structure of an intended novel can present itself in its entirety to mind, often under the most unlikely of circumstances, leaving one with the task of filling in the details. However, the first time I read *Quantum Creativity* by Amit Goswami, I didn't know what to make of it. I have to admit that my first impression was largely unfavourable.

My main concern centred on the disdainful attitude taken to the present paradigm of scientific materialism from the beginning of Chapter 2 onwards. I was reminded of Erwin Schrodinger's warning many years ago that, whereas Western Science would benefit from an infusion of Eastern thought, care must be exercised to avoid blunders; consult Ref.[2].

I was uncomfortable with his assertion that the neurophysiology of experience, let alone its creative expression is a 'hard' problem beyond reductionism to explain. Is this correct? After all, Daniel Dennett, one of the so called 'Four Horsemen' of New Atheism seems to have made a good fist of it; consult Ref. [4].

I also didn't like the way Goswami mixes up his new quantum terminology with the language of the mystical traditions of the Perennial Philosophy. For instance, he equates his so called quantum self with the Atman.

I felt that Goswami was trying to do a 'Capra' in *Quantum Creativity* but without the latter's masterly multi-disciplinary grasp; consult Ref. [1].

Nevertheless, I decided his book deserved a second, more considered read. As a result, I have formed a completely different perception of Goswami's work and come to the realisation that I have been influenced by limitations in my own understanding, coupled with unhelpful personal biases and misjudgement. The rest of this review is based upon this second reading; I have undergone a personal paradigm shift, so to speak.

Quantum Creativity consists of a preface followed by 22 chapters in 6 parts. In the preface, Dr Goswami explains that, although an earlier volume of his book was written over ten years ago for academic researchers, the current edition has been revised for a more general readership. For those that do not know of him, Amit Goswami is a colourful character who describes himself as a quantum activist. In fact, he is regarded by some as the leader of a growing religious movement which appears to be based, at least in part, on the controversial Penrose-Hameroff model of quantum consciousness. Dr Goswami grew up in India as the son of a priest. He is a retired professor of theoretical nuclear physics at the University of Oregon where he has served since 1968. He is a pioneer of a new paradigm based on the primacy of consciousness with the emphasis of so called 'downward causation'. He appeared in the 2004 film: *What the Bleep Do We Know* and its 2006 sequel: *Down the Rabbit Hole* as well as in the award winning documentary: *The Quantum Activist.*

In Part 1 of his latest book, the author wastes no time in attacking the existing paradigm of scientific materialism and introducing an alternative world view which takes universal consciousness as the foundation of all being.

He explains creativity in terms of the causal power of divine consciousness to choose from a myriad of quantum possibilities in actualizing the manifest world.

In Part 2, the author explains the creative process in more depth, indicating that there are 4 essential stages to it: preparation, incubation, insight and manifestation. He pays particular attention to unconscious processing and the evidence for it, leading to what he calls the 'aha' moment of sudden vision and understanding.

In Part 3, the author attempts to answer the question: 'Can anyone be creative?' In the so doing thereof, he discusses the origin of the creative trait in people and whether it is due to genes, brains or environment. He expresses the view that, in the case of child prodigies such as Mozart, the talent has been carried forward from previous lifetimes.

In Part 4, Goswami discusses the impact of the new paradigm on such diverse areas as the arts, business, education and even personal relationships.

He concedes that the shift in worldview from materialism to the primacy of consciousness is likely to encounter stiff resistance.

In Part 5, the author discusses spiritual creativity and explains how we can transcend our usual sense of identity–our conditioned ego–and connect with our higher or quantum self. In the final part of his book, Goswami offers guidance on how to bring creativity into the centre of one's life. He details the following practices to enable a breakthrough through the habitual patterns of the ego to allow participation in quantum or higher consciousness. They are as follows: - Intention-setting, slowing down, inner focussing, alternating action with relaxation, constructive use of the imagination, working with Jungian archetypes and remembering your dharma. To this end, he describes his own transcendental or peak experience following a meditative practice of concentrating and internalizing a mantra over a period of seven days. He writes in terms of the cosmos opening up to him, of the intensification of sensations beyond belief and of an overwhelming feeling of universal love and bliss. To me, this is the most important and relevant part of his book and suggests that the author is writing from a standpoint of deep personal experience and not some cranky or fashionable theory. Dr Goswami seems to be able to walk the walk as well as talk the talk.

In summary, I still find the author's style rather quirky even on as second reading. But in fairness to him, part of the problem seems to be the difficulty that any writer is likely to encounter when trying to explain inherently non-linear and complex concepts within the constraints of a written language. This issue and an attempt at a solution are touched upon in the preface of Fritjof Capra's new offering, consult Ref. [3].

In the opinion of this reviewer, *Quantum Creativity* is not a literary masterpiece. It is however, despite my perception of stylistic flaws, a brave, interesting and controversial attempt to address our contemporary ills in an unusual way. Hats off to the Professor for sticking his head above the parapet … he appears to write from the heart and from direct experience … and what he has to say may be just what the world needs to hear now.

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medicine-health

Taking on the Corporate Consumption Complex

David Lorimer

LETHAL BUT LEGAL

Nicholas Freudenberg

Oxford, 2014, 324 pp., $29.95, h/b – ISBN 978-0-19-993719-6

This seminal book about the impact of corporate policies on public health has been widely endorsed by leading figures in the field and aptly described by Ralph Nader as a reservoir of constructive indignation. This indignation is equally matched by strategic nous as the author details how these policies can be reversed while restoring democracy over lobbying interests. The main thesis is that corporations are enriching themselves at the expense of public health and that this is an unsustainable situation. He focuses on six industries: food, tobacco, alcohol, pharmaceutical, gun and auto; these last two are in a somewhat different category, but nevertheless have destructive side effects. The two main parts of the book define the problem and suggest potential solutions, which will have to be applied on a global level.

Freudenberg begins by showing how unhealthy products have become ubiquitous and that corporations are effectively manufacturing illness under the general heading of diseases of affluence or civilisation, with accompanying obesity. New science and technology have been used to promote profit rather than prevent illness and are seen by government in many cases as engines of desirable economic growth. However, spiralling health costs make this unsustainable. Already, the US is spending $174 billion a year on treating diabetes. The author introduces some useful new terminology under the heading of the corporate consumption complex representing a network of corporations, financial institutions, banks, trade associations, advertising, lobbying and legal firms, all of whom promote what he calls hyperconsumption – a pattern of consuming directly linked to premature mortality and preventable illness or injury. These interests, as Al Gore pointed out in his recent book, threaten public health and undermine democracy.

These policies result from decisions made by executives in the industries already referred to. Pressure from shareholders and short-term profit targets mean that more money is spent on promoting products described as 'fun for you' than those healthy options 'good for you.' As other books have also shown, scientific research is used to establish the bliss point in the brain of competing products so as to maximise the chances of consumers becoming addicted. Executives are trying to increase their 'share of stomach' and activate buying impulses in the customers. Mexico makes a particularly worrying case study where US trade liberalisation policy has directly contributed to the rocketing levels of obesity in that country. Food, alcohol and tobacco industries have used similar tactics and do their best to water down or block any legislation designed to regulate their market penetration through lobbying, campaign contributions and helping formulate business friendly trade agreements – currently the secretive Trans-Pacific Partnership (TPP) that will allow corporations to sue governments for unfriendly regulations.

The author documents in some detail how corporate practices have contributed to global epidemics of chronic diseases and injuries, the last being caused by guns and car accidents. By 2030, non-communicable diseases will cause three quarters of all deaths in the world. Almost 10,000 young people aged 15 to 24 died in 2010 as a result of suicide or homicide.

Cumulatively since 1960, over 1 million US citizens have been killed by firearms and 2 million have suffered non-fatal gun injuries. This represents 13 times more people killed by firearms than soldiers in wars in Vietnam, Iraq and Afghanistan combined. 44% of the US population have one or more chronic conditions, and this is set to rise to over 50% in the next 10 years. The book also covers the pharmaceutical industry and their role in misrepresenting risk, selling sickness and co-opting doctors to make a profit. Overall, this situation represents a major public health challenge that will require leadership at NGO and grassroots level as well as government.

The next chapter explains how corporations have taken control of the economy and the factors that have brought about the current situation: short-termism, financialisation, deregulation, tax relief, privatisation and market concentration. Between 2000 and 2005 alone, the number of registered lobbyists in Washington DC more than doubled to nearly 35,000. A chapter specifically on the corporate consumption complex explains the various interconnections between institutions and gives chilling examples of business practices at McDonald's leading to 'rising rates of diet related diseases, unsustainable agricultural practices and environmental damage, lower wages, rising income inequality and diminished democracy' - the author comments that what is good for business may be bad for human well-being. Similar tactics are employed at the Pharmaceutical Manufacturers Association.

There is a very useful discussion of the core beliefs associated with the corporate ideology of consumption, and many of these shift responsibility away from the company towards the consumer. They include education as the best means of helping customers make better choices when exposed to advertising, that free trade is good for everyone and that promoting consumption is essential for economic growth and prosperity. This ideology is in turn underpinned by dubious scientific claims that also reinforce a deterministic and controlling outlook. The author shows how such claims can be dismantled and cites examples of social groups acting to create ideological alternatives, providing a corresponding set of core beliefs and values (p. 152) such as making a profit by sickening others is wrong, that the goal of social policy should be to make healthy choices easy choices, and that every generation should leave the world a better place.

By this point, some readers may be somewhat discouraged, but the second part provides robust reasons for optimism and activism. The author gives historical examples from food and drug safety, child labour, food justice movements, the California air resources board and health professionals resisting capture by the pharmaceutical industry. The tobacco industry is heavily lambasted, including by the director-general of the WHO. We can learn from successful strategies already implemented by campaigns to change the business and political practices of multinational corporations. This will involve constructing and popularising an alternative ideology of health and democracy, dismantling the corporate consumption complex and forging a policy agenda offering a vision of a healthier and more democratic future. This may seem a tall order, but the alternative is to accept continuing rises in global premature deaths and preventable illnesses and injuries. The author urges campaigns to engage the mind and emotions, targeting specific companies to generate outrage fuelling advocacy and framing efforts in clear moral terms. We need to evict these corporations from our consciousness, our communities and our political system. He also provides a detailed policy agenda a movement for a healthier future, showing how some of these ideas are already being implemented. This chapter alone is worth the price of the book, providing as it does a coherent intellectual and moral framework for change. Interested readers can also consult www.corporationsandhealth.org but I would urge those directly concerned with these issues to read this remarkable and highly informative book.

Long Term Customers?

David Lorimer

OFF BALANCE

Dr Leyla Ali

Self-published, 2012, 278 pp., $19.95, p/b – ISBN 978-0-9853452-0-4

Subtitled 'a pharmacist's perspective on why drugs don't work', this book is a damning indictment of what has become the American health system based on the author's own experience and extensive interviews with individuals who, after long years of struggle and suffering, have found their health through natural or holistic treatments and been inspired to become holistic practitioners themselves. The book is well set out, with amusing cartoons at the beginning of each chapter and interviews with a practitioner at the end of each section. The author explains in her introduction that we have introduced a new so-called health care system whereby the traditional cycle serving to maintain a healthy and balanced body and mind has been replaced by a new cycle whereby doctors have become part of the system to create long-term customers for pharmaceutical companies without realising the inherent limitations of the medical model in which they have been trained, which in most cases contains little or no nutritional education. Many of the conditions treated will not be resolved and the drugs themselves will lead to further complications and side effects.

The author describes her own journey through pharmaceutical education and working in a pharmacy before she realises that the medical industry has become a feeder system for pharmaceutical distribution. She explains some of the history of how this has come about and provides a useful comparative chart of contrasts between holistic and standard American medicine. She also describes the main natural therapies and what they may be appropriate for. Personally, I had not come across the work of Harry Hoxley, who invented a successful treatment for cancer, and was therefore hounded by the AMA and the police. He was arrested over 100 times but each time he was put in jail, his patients would surround the jail, singing and praying until he was released. Eventually he won an action against the AMA for slander and libel. Even so, the FDA eventually shut down all 17 of his clinics in 1960, claiming that there was no known cure for cancer and that he was therefore doing something illegal. The treatment of such pioneers is nothing short of disgraceful, with the FDA and other agencies simply acting on behalf of the pharmaceutical industry. Doctors often define a condition as incurable when it is only in their own terms, and numerous patients have in fact been cured of incurable conditions by alternative and natural remedies.

In a chapter on what is wrong with American medicine, the author gives the example of stages of treatment for rheumatoid arthritis and diabetes, showing how in many cases the condition is exacerbated by the treatment and therefore requires even further treatment down the line. In one particularly horrifying case history, she details 41 separate drugs being taken by a patient at the cost of over $5000 a month. There are chapters on detoxification, acidity and alkaline levels in the body, weight loss and pain. Then there are separate discussions of the power of the mind and the role of emotions in positive and negative terms, with some useful practical advice. The scandal of cancer and its treatment is the subject of a separate chapter, and includes a note on the suppression of holistic therapies and cancer laws, which make it illegal to claim to cure cancer and form the basis of the FDA or AMA closing down natural health clinics, as mentioned above. She writes that it was very hard for her to believe that the government and the entire healthcare system has gone so far astray that the best choices to treat cancer are suppressed and the more toxic though profitable therapies have become standard.

The sad fact is that the American health system has shifted away from the goal of achieving optimal health

and wellness towards the business of earning money, even at the expense of the good health of the patient. As I also mentioned in reviews in the previous issue, the pharmaceutical industry has come to dominate the entire medical system and is so powerful that it can suppress natural approaches to health and their practitioners. Regulatory bodies like the FDA have become part of the problem and business practices regularly involve fraud leading to significant fines, which, although they are enormous, are only a fraction of profits earned through the incriminated drug. The only answer is for patients to become educated and to take their own initiative so far as maintaining their own health is concerned. In the last chapter, the author provides some useful signposts. This is a wake-up call for Americans in particular, although Europeans can also learn a great deal, especially given that regulation tends to move from America to Europe.

Is Breathwork Tomorrow's Psychotherapy?

Gunnel Minett

THE HEALING POWER OF THE BREATH, Simple techniques to reduce stress and anxiety, enhance concentration, and balance your emotions

Richard P. Brown, MD and Patricia L. Gerbarg, MD

Shambhala Publications, London, 2012, 168 pp., + audio CD, £ 14.10

As the title of this book points out in detail, this is all about learning to 'breathe yourself' to better health. It gives clear instruction as to how to practise breathing techniques to reduce stress and improve physical and mental wellbeing. The authors both have long experience of teaching these techniques. Richard Brown is associate clinical professor of psychiatry at Columbia University and Patricia Gerbarg has the same position at New York Medical College. Their techniques are derived from yoga, qigong as well as modern breathing and meditation techniques.

The techniques are designed to slow down the natural breathing pattern, to balance the breathing pattern and to use sound as part of one's breathing. By balancing and harmonising the breathing pattern we automatically balance and harmonise the body and brain. This in turn has an impact on thoughts and emotions, which in turn leads to increased inner wellbeing, both mental but also physical since the body usually suffers from negative thoughts and emotions.

More recent research also indicates a direct effect on hormones, which means more precise ways of measuring the effects of body oriented techniques such as breathwork. The book also suggests another interesting potential for breathwork: it could become a very efficient tool to counter stress in war zones and third world countries. It doesn't require special equipment, drugs or other medical facilities. It can be taught on the spot to large groups and at minimal cost compared to conventional therapy or medical treatment.

Another positive aspect of the breathwork taught in this book is that it can easily be learnt by simply following the instructions in the book and on the CD. The only reservation is that, although the breathing exercises are deceptively easy to learn and practice at home alone, the effects can be surprisingly strong. The authors therefore recommend attending a workshop in addition to reading the book, in particular for people who may be experiencing stress from past trauma.

An obvious conclusion to draw from this book that body oriented psychotherapy, such as breathwork, shows all signs of being a therapy for the future. In particular if it is taught from an early age as a way of managing the stress that is almost inevitable in modern life. Hopefully the work of the authors and other breathworkers will contribute to this future scenario.

Gunnel Minett** is the author of **Breath and Spirit.

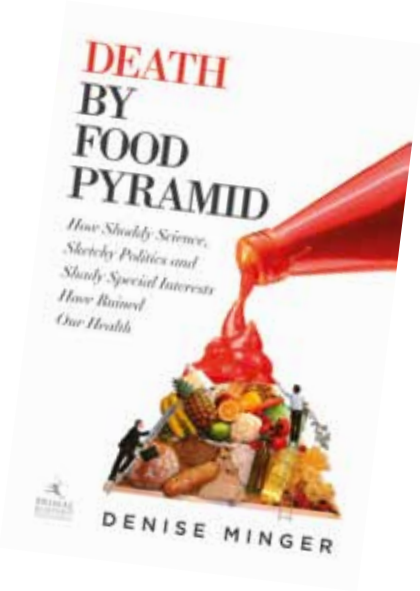
Deconstructing Dietary Dogmatism

David Lorimer

DEATH BY FOOD PYRAMID

Denise Minger

Primal Blueprint, 2014, 292 pp., $24.95, h/b – ISBN 978-0-9847551-2-7



Like the book by Dr Leyla, this one is also based on the author's own experience and is subtitled 'how shoddy science, sketchy politics and shady special interests ruined your health… and how to reclaim it' - a description amply borne out by what follows. The foreword by Chris Masterjohn bears out of the experience of the author's own health worsening in many ways by following a strict vegetarian then vegan diet; he only recovered through eating high quality nutrient dense animal foods. This epitomises the difference in approach between advocates of the influential China Study (which I reviewed positively in 2006) and that of the Weston Price Foundation, which promotes the Paleo diet. Interestingly, during the detoxification phase, she felt and looked great, but later lacked energy, lost too much weight and suffered extensive dental problems.

Food is a province of competing experts, many of whom contradict each other. This makes it difficult for the layman to know what to believe, and one of the principal aims of this thorough and entertainingly written book is to provide us with the tools to take our own view by identifying bias, balancing open-mindedness with scepticism and challenging assumptions. The Food Pyramid of the title refers to the genesis of the USDA recommendations in the early 1990s, with a diagram showing what portions of food were recommended in the overall diet. As with other regulations, this soon fell foul of the food industry lobby and emerged in a very different form. In the final analysis, the USDA protects the interests of large farmers rather than promoting public health. More rigorous earlier versions of the pyramid were scotched by the food industry.

A key issue is the low-fat revolution initiated by Nathan Pritikin and others. The best-known research was carried out by Ancel Keys, who became a passionate advocate of the low-fat approach. Unfortunately, his data mistook cause for correlation and was extensively criticised by other scholars. Then John Yudkin comes along, making a similar case for the role of sugar, and in both cases the food industry weighs in. The author makes the observation that anyone who is certain about everything in nutrition is almost definitely wrong. She provides a series of test questions to help evaluate the status of experts and lists six logical flaws to look out for in an academic paper: ad hominem arguments, anecdotal evidence, appealed to authority, misplacing the burden of proof, cherry picking and setting up a straw man. In the following chapter, she gives a hitchhiker's guide to nutritional research and frequently used terminology, also explaining the status of different types of study and how to read a scientific paper.

She then looks in detail at the story of Ancel Keys and his lipid hypothesis for the genesis of heart disease. She provides a series of scientific critiques, even showing that countries with higher average fat intake and high cholesterol levels have the longest life expectancies. The overall error is mistaking one factor as exclusively causal without regard for the context and other potential factors. This kind of tunnel vision thinking is built into scientific reductionism but is inappropriate for complex and multifactorial situations. It is more probable that elements of affluence may form a toxic cocktail for heart disease and that the combination of various factors analysed, when combined with stress and a sedentary lifestyle, creates perfect storm conditions for heart disease. Long-term studies like Framingham in Massachusetts reinforce this conclusion.

It is equally hard to know with certainty the role played by individual elements of special diets, and it is particularly instructive to read the analysis of vegan diets and what they lack in essential nutrients. The final chapter presents three principal approaches: the Paleo, the Mediterranean and the Whole-Foods, Plant-Based. Each is explained in terms of its elements, claim to fame and caveats, with a corresponding pyramid diagram. The aha moment is finding where they all intersect and realising that their common exclusions are industrially produced vegetable oils, refined grains and refined sugar, which could explain their similar successes with health promotion and weight loss. So it's really as much about what we don't eat as what we do.

In this chapter, there is also extensive discussion of the work of Weston Price and the differing communities he observed, which reinforces the conclusion about since none of these communities ate modern refined food - and their health declined when they began to do so, as Sir Robert McCarrison also discovered in India. Interestingly, the common prized foods contained high-density fat-soluble vitamins. On a practical level, this means that chasing a single ideal diet is the wrong route, and that one should pay as much attention to what one does not eat. This, moreover, is to some extent an individual matter, as the author explains while giving some very helpful overall advice. She also encourages us to remember that we are equipped with voting, spending and intellectual power, encouraging us to use it where we can. We can have what she calls a life of educated freedom rather than death by food pyramid, and her book provides a vital guide for interested people.

Pioneering the Spiritual and the Occult

Edi Bilimoria

LION OF LIGHT - The Spiritual Life of Madame Blavatsky

Gordon Strong

Axis Mundi Books, 2013, 209 pp., £9.99, p/b – ISBN 978 1 78099 653 0

Note: a full version of this review with more details in support of the criticisms made is available from the editor

Only a biographer with a lion heart would dare to write about Madame Blavatsky and include within his scope her early life and world travels, including her time in India; her writings and her association with colleagues, friends and enemies; then comment on The Theosophical Society, on other spiritual organisations, on the Masters and on Truth; and conclude with Blavatsky's legacy and her astrological analysis: all of that in a book (without an index) of 133, A5 pages.

I would normally be as indifferent to odd typos or inaccuracies in an erudite book as I would be with a sprinkling of wrong notes in a great musical performance. However over 20 pages (more than fifteen percent) of the book contain errors of spelling, syntax, referencing, and reference numbering, symptomatic of sloppy proof reading and inadequate research.

Are all these inaccuracies, then, counterbalanced by the quality of the exposition? Gordon Strong makes it plain in an eloquently worded introduction that he has no 'literary axe to grind', his motive being a 'fascination and respect for the subject'. He quite rightly points out that Blavatsky has been 'vilified and championed in equal measure' and that of the latter, some 'seek to paint a flawless picture of their subject'. It is therefore a tribute to the author that he strives to give an account without elevating Blavatsky to faultless, deific status as so many of the credulous Blavatsky-fundamentalists are all too prone to doing. Unfortunately though, his idea of a balanced perspective drives him into all manner of suppositions, presumptions and dogmatic statements supported with either flimsy evidence or no evidence at all. He goes to extremes to opine that Blavatsky was supposed to be utterly autocratic, would brook no rivalry and would suffer no views other than her own; moreover that some of her statements were hypocritical and that she behaved viciously towards Mabel Collins whom she snidely accused of practising black magic. So all in all, 'The Spiritual Life of Madame Blavatsky' has become his version of a garbled psychological analysis of Blavatsky.

We may pass by all this as being the author's opinions. But we cannot let pass some statements that are as inaccurate as they are highly damaging. Blavatsky's 'outright dismissal of the occult' is a very poorly worded way of stating her outright dismissal of the misuse of occult powers, the so-called Left Hand path. Then her 'outright prejudice against Western spirituality' is a complete misunderstanding that what she strove to do was to restore and point towards the spirituality of the East at a time when Eastern philosophies were very little known given the current (nineteenth century) prejudice of the unquestionable superiority of the Englishman over the Indian and therefore the unquestioned supremacy of Western thought. Then we are told that Blavatsky eschewed Christianity, ignorant of the fact that she railed against Churchianity, or *sham* Christianity, this Church-Christianity being the dogmatic and fossilised version of the true living message of the Christ, the living spirit killed by the dead letter in the hands of proselytising priests and Christian missionaries. Blavatsky is also supposed to have accused the Greek philosophers of gross errors setting herself up against minds greater than her own but with little intellectual firepower – overlooking the innumerable deferential references to Greek luminaries littered throughout her writings.

And then we have a potted history of the highly complicated and contorted affairs and struggles of The Theosophical Society, including all the internal dissensions and disputes, plus the Judge affair and Krishnamurti saga all polished off in under 15 pages. This is, frankly, mud raking that provides no insight. Instead of wasting our time on Leadbeater's supposed pederasty which even to this day, despite all the machinations and counterclaims has never been conclusively proven, why not instead mention the book that he wrote with Annie Besant: Occult Chemistry, being the remote viewing of subatomic particles, a book that has interested scholars and scientists of international acclaim. Annie Besant fares poorly in Strong's hands. Never mind that her tremendous social work in India resulted in her election as president of the India National Congress. Moreover, that she was a prolific and phenomenal theosophical author, indefatigable lecturer and The Theosophical Society owed most of its membership to her magnetic oratory; and its assets to her far reaching business sense. To claim that Besant and Leadbeater 'ruined Blavatsky's cosmology' ignores the fact that Blavatsky herself periodically modified the esoteric taxonomy to suit the context of what could legitimately be revealed and what could be understood in the English tongue by the public at large, especially in the West. In this guise, it is pity that Strong has not mentioned the core ethos of The Theosophical Society concerning freedom of thought: that the teachings promulgated should not be taken as authority, but rather investigated with

openness, impartiality and without dogma. This is of the very greatest importance flying in the face of mistaken ideas that theosophy is a new-fangled religion invented by Blavatsky, or that 'Blavatsky *is* The Theosophical Society' as Strong opines.

What useful material can we dredge from the book? There are several insightful remarks. For example: that the notion of combining the spiritual and the scientific was the bedrock on which The Theosophical Society was built; that Blavatsky was incapable of fraud and owned occult powers using them to achieve what she considered best for the world; that the inner, soul-life of an individual is of supreme importance; that when an individual earnestly decides to follow a spiritual path, he is severely tested and every trait in his personality rises to the surface; that some members of The Theosophical Society were not as altruistic as Blavatsky, using the Society to gain personal ambition; and most importantly, the 'dangers latent in any group devoted to spiritual work'. We are grateful for Strong's succinct and accurate accounts of the appalling vilification of Blavatsky by Solovyov, and the high-handed manner in which she was labelled a fraud following the 1885 Hodgson report by the Society for Psychical Research, which body then retracted their decision in the light of the Harrison report of 1986.

But despite these many useful commentaries he has tried to cover far too much material. The subject would have been much better served had he concentrated on a few major topics: for example, the problems and tests of individuals and groups devoted to spiritual matters, and especially, Blavatsky's massive erudition – *Isis Unveiled* contains passages from 1339 different works and in *The Secret Doctrine* 1147 different works (including the leading scientists of her day and earlier epochs) are quoted and referenced in support of the occult doctrines propounded. Instead of forays into irrelevant and scurrilous material, Blavatsky's vision, legacy and any account of her spiritual life would have greatly benefitted by highlighting the testimony of the many great scientists who were drawn to occultism – Einstein (who was intrigued by *The Secret Doctrine* recommending it to Heisenberg), and Sir William Crookes, to name but three; and discussing her own passion for placing the occult doctrines on a firm scientific footing as the Theosophical Research Centre (comprising eminent scientists, including a Fellow of the Royal Society) so magnificently attempted to do.

Edi Bilimoria *was a member of The Theosophical Society for over 40 years with numerous publications to his credit in addition to his lectures and study course on the perennial philosophy world-wide.*

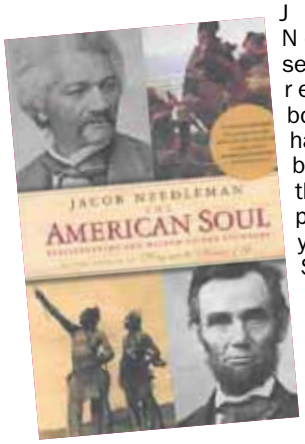
Inner Vision and Moral Power

David Lorimer

THE AMERICAN SOUL

Jacob Needleman

Tarcher Putnam, 2002, 377 pp., $15.95, p/b – ISBN 978-1-58542-226-5



Jacob Needleman sent me this remarkable book, which I had not seen before, even though it was published 12 years ago. Subtitled 'rediscovering the wisdom of the founders' it is nothing short of a new moral vision not only for America, but also for any country and individual that wants to contribute to the creation of a true civilisation. The idea of America is a hope, a vision for the future, a new beginning and a sense of unfolding destiny. It is an idea and an ideal that America itself has failed to live up to, but it is nevertheless a source of renewed vision for the future in embodying the inner meaning of the principles that formed the basis of American democracy in the late 18th century.

As human beings we exist between two worlds, 'an inner world of great spiritual vision and power, and an outer world of material realities and constraint.' In this sense, freedom is understood not as indulgence of desires but as obedient submission to a deep inner law whereby we become instruments of action for the expression of divine law and love, which proceeds from our common cosmic Selfhood, as Emerson also understood. This combines inner freedom with outer engagement, metaphysics with spiritual psychology expressed in politics. Arnold Toynbee also showed in his *Study of History* that the origins of civilisation lie in the inner life of humanity and the corresponding decline when civilisations succumb to outer forms (image) and decadent materialism. Pitirim Sorokin reached a similar conclusion.

Jacob begins with his own experience of being inducted into American identity, first through the flag but then in a deeper sense of understanding the philosophical identity of America 'composed of ideas of freedom, liberty, independent thought, independent conscience, self-reliance, hard work, justice.' As he shows, each of these ideals can be distorted, but it is always possible to return to their original meaning and intent as envisaged and embodied by the founders of American democracy. He goes back even further to the writings of William Penn on the inner light and his reflections on the relationship between contemplation and action. Benjamin Franklin is the first seminal figure to be considered with his key influence on the formulation of the constitution and his initiation of the American tradition of self-improvement. He made an inner demand on individuals, calling them to express the highest in themselves.

The section on Washington is quite fascinating. He was a man of great physical presence and moral authority who made way both militarily and politically at crucial points, thus reinforcing and embodying the idea of democracy. He was a man of great strength and maintained within himself the paradoxes of, for instance, ambition and self-sacrifice, passion and impartiality, the all too human alongside 'highly developed powers of will, courage, impartial love and the capacity for right action.' This seems to stem from his striving towards self-mastery from a very early age, developing the force and quality of his character and following in Franklin's footsteps. It is ultimately inner freedom that bestows moral power, as Nelson Mandela also demonstrated in our time. His farewell speech, quoted and analysed at length, is both eloquent and moving. He urges his fellow citizens to observe good faith and justice towards all nations and to cultivate peace and harmony with all, guided by exalted justice and benevolence. In this, he is also concerned to moderate the fury of party spirit.

Jacob now moves onto Jefferson, again painting a vivid portrait of the man in all his complexity and brilliance. For Jefferson, self-government is the incarnation of our free will and happiness not merely the satisfaction of desires. The American ideals must be interiorised if they are to achieve true political expression. In contrast to Calvin and Luther, Jefferson had a positive view of human capacities, while also recognising human frailties. It is important to remember the spirit of the Enlightenment and its understandings of reason and freedom while reading all this. Following a spiritual logic, Jefferson sought to create a form of government and constitution 'that allows the liberty of free, potentially divine human beings, while at the same time checking the bestial, egoistic forces that in fact dominate our fallen nature.' The situation is no different today in that we are still both inwardly free and inwardly slaves the same time, 'great and fallen, strong and weak.' Jefferson proposes the communal self as a reconciling force in this process.

A short chapter on Lincoln follows, with an interesting reminder that the exposure time for photographs was very long, which explains why Lincoln's humour does not appear in his face. Lincoln was an individual in the true

sense of the word as a responsible man who was also a force of human presence, both engaged and detached.

Earlier in the book, Jacob remarks on the blindness of both Washington and Jefferson with respect to the status of slaves in relation to the equality expressed in the constitution. This next section treats the historical crimes of America, principally against the American Indians and the slaves. He explains the native Indian understanding of peace, justice and conscience, relating this principally through stories, for instance about Hiawatha. He argues that a state of being was lost through the crushing of American Indians, but this spirit is surely coming back in our time.

One of the most powerful sections of the book, and worth buying for this alone, is the analysis of the speech given by Frederick Douglass (1818-1894) on July 5, 1852. I must confess that I knew very little about him before reading this book, and imagine this will also be the case with many readers. Douglass had been brought up as a slave, but at the age of 15 he resisted and confronted his tormentor and became inwardly free, contacting his deep Self and realising that he was not afraid to die. This is genuine inner revolution. He begins his speech by asking whether the invitation to speak signified: 'do you mean, citizens, to mock me, asking me to speak today?' The speech must be one of the greatest, most eloquent and most moving ever given, and I urge you to read it for yourself. You will be profoundly touched and rather shocked that his sentiments took over 100 years to reach fruition in the civil rights movement of the 1960s. His accusations of inconsistency with respect to freedom and equality are truly excoriating, a denial of the sacred in humanity and a manifestation of barbarism and hypocrisy. Historically, though, it was not the Civil War that broke America's heart, but Vietnam. Given these crimes, one easily understands both the vision and the illusion of America and the implicit invitation to return to the true meaning of those founding principles.

At this point, Jacob tells the story of the community established at Ephrata in 1728 by Conrad Beissel. In 1735 a certain Peter Miller was appointed leader of the community and a local businessman, Michael Widman, became his tormentor, having nothing but contempt for the community, even to the extent of physically assaulting Miller and spitting in his face. Widman eventually turns traitor and is condemned to death for treachery under the jurisdiction of Washington. When Miller hears this, he makes the long journey to plead for his forgiveness. Washington assumes that he must be a friend, at which point Miller explains that Widman has been for years his most persecuting enemy but that his religion teaches him to pray for those who despitefully use him. After a long silence, Washington issues the pardon on one condition: that Miller takes it himself. After a further walk of some 20 miles, Miller finds himself standing in front of Widman, who already has a rope around his neck. On seeing him, Widman actually asks for forgiveness and must have been quite astounded to learn that Miller himself had pleaded for his pardon with Washington. This is one of the most moving episodes of moral courage and power that I know.

Whitman is also quoted in upholding the wisdom principles embodied in American ideals before Jacob concludes his reflections on the nature of the inner America: 'it is a deep, hidden power of consciousness and moral power within every human being, a force, an intensity of feeling and knowing that defines us as human beings, that defines our place in nature, on earth and with each other.' The deeper meaning of character is represented by inner revolution whereby we realise that we are not only flesh and blood individuals but can become instruments of impersonal greatness, both a personality and a soul. In this respect, it is critical to give priority to the soul. He muses that the future is another word for the soul while remarking that this requires a specific human effort to create, or else hope will disappear: we have to choose 'to love and serve the common good under a freely chosen obedience to a higher law.' As I think the reader will understand, this is a profoundly inspiring book that speaks to the inner condition of both us as individuals and as a culture, at the same time inviting the reader to become an expression of their highest self in service to others.

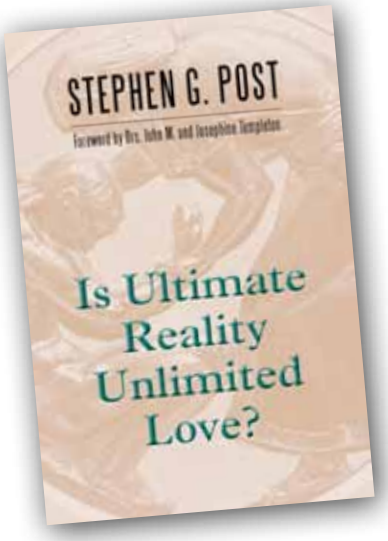
A Humble Approach

David Lorimer

IS ULTIMATE REALITY UNLIMITED LOVE?

Stephen G. Post

Templeton Press, 2014, 368 pp., $34.95, p/b – ISBN 978-1-59947-451-9



The question mark in the title of this book about Sir John Templeton is no accident. With his humble approach, Sir John was not one to make grand claims but rather to ask significant questions to invite deep reflection. This is one of the most profound questions that one can ask. In a scientific sense it might seem implausible, but mystics from every tradition affirm the ultimate reality of the divine as love on the basis of their own experience.

This book demonstrates the centrality of unlimited love in Sir John's life and documents his role in helping set up The Institute for Unlimited Love run by the author. The three parts explain why this idea meant so much to him, three primary evidences of his thesis, and statements from family members, associates and scholarly friends. The reader is left in no doubt that Sir John's answer to the question in the title is a resounding affirmative, which he demonstrated extensively throughout his life. Indeed, he emerges from the book as much as a spiritual leader as a leader in business and philanthropy. For example, there his moving prayer quoted early in the book, and his statement about the nature of love is comprehensive and moving. I will come back to this at the end of the review. His hope was that the world's great spiritual traditions might converge around this matrix of Unlimited Love.

An important formative influence was the work of Charles Fillmore, who was a leader in the New Thought Movement. This came out in his use of spiritual affirmations and also in the central thought that the human mind is a microcosm or image of the universal Divine Mind. As Thomas Troward put it, our innermost centre is the divine within us. Importantly, this makes us co-creators with God and instruments or radiators of his love in the world. He also agreed with the proposition by Marcus Aurelius that your life becomes what you think about, and placed special emphasis on cultivating the garden of the mind with positive and uplifting thoughts. He often used to say that when you rule your mind, you will rule your world. As indicated in the title of this review, Sir John was a humble man in spite of his remarkable achievements. He writes that most great people are humble as they realise that a higher power is working through them - this was also emphatically true of Walter Russell. Hence the true meaning of humility is knowing that the personal self is a vehicle for a higher power.

A special feature of the book is its extensive quotations from Sir John's own writing and letters. In 2005 he wrote asking for the author's views on a number of significant ideas. He writes that 'often people seek love to become happy. But really, happiness comes from giving unlimited love. The more love you can give the more you have left to give' - a wise and true observation.

He remarks that life is always a vast mystery, but that enlightenment can come from enthusiasm to give unlimited love. He ends the letter with 'God bless you.' He himself exemplified what he writes about, urging us to centre our minds on truth and love. The work I am currently doing with thousands of young people around the world through my Inspire>Aspire programme is directly inspired by Sir John's own work on laws of life and is generously supported by his Foundation. I encourage them to realise that everything begins with the nature of their thinking, that 'thoughts are things' and that their lives should be lived from the inside out.

A sense of purpose was very important to Sir John. Stephen writes that for him life was all about growth, becoming, process, change, resurrections and transformations. If purpose is the key human spiritual problem, then Unlimited Love is the answer and joy is a by-product of this love. The happiest people are the most grateful - another quality highly prized by Sir John - and those who radiate love for everyone. One of the important books republished by the Foundation in 2002 was *The Ways and Power of Love* by Pitirim Sorokin, and Sir John drew on some of his central concepts in developing his own philosophy of love, in particular that of extensivity, extending love to the whole of mankind.

The second part examines the propositions that people widely self-report spiritual experiences of unlimited love and an associated enhancement of benevolence, that people who love God and their neighbours as themselves generally live healthier and more joyful lives, and that it is eminently plausible that there is an underlying ground of being or ultimate reality that constantly creates and sustains the universe. Stephen brings forward a good deal of evidence to support these hypotheses, also drawing on physics and cosmology. The third part is derived from an invitation by the author to offer their thoughts on what Sir John meant by unlimited love as ultimate reality. Contributors include Owen Gingerich, George Ellis, Robert John Russell, Russell Stannard, Ian Barbour and Harold Koenig. I found Ellis' discussion of foundational levels in the sciences illuminating in the priority it gives to the metaphysics of cosmology in terms of morality, telos and meaning. Ian Barbour writes that we should put more emphasis on immanence then transcendence today, which is consistent with views of emergence.

A separate chapter describes ways in which Sir John tried to live a life of love by members of his family, and his special qualities come across very strongly - his granddaughter writes about the quality of his hugs, his reassurances of love and his support for her development. He wished for all his children and grandchildren a richness of the spirit. After some quotations for reflection, there are facsimiles of letters to and from him and the author, including his own entry on the love-scale questionnaire. As I mentioned above, his accompanying statement is a very powerful one and includes the words: 'Love is the most powerful dynamic in our lives and in the universe, and the more we learn about it and practise it, the better of the future will be… Love is helping people to grow in creativity and discovery and vision.. Love is the power that binds the universe, that harmonises, that creates without destroying, and then enhances every aspect of a person's life. And lovedblesses not just those who receive, but perhaps even more, those who give. That is what I have lived by.' This is an inspiring motto from an inspiring book, and one to which we can all aspire.

A Fitting Tribute

Chris Allen

THE WAR AGAINST SLEEP AND THE STRANGE LIFE OF P. D. OUSPENSKY

Colin Wilson

The War against Sleep originally published in 1980 ISBN: 0-9760402-2-0 The Strange Life of P.D. Ouspensky originally published in 1993 Now available from Amazon as a single downloadable e-book: price £6.47

I was saddened to learn recently of the death of Colin Wilson, one of my favourite authors, in December of 2013. By way of tribute, I should like to review two of his books which are, in my opinion, good examples of the best of his work; they both are carefully researched biographies.

The author's writing style in each book is always engaging; he presents a fascinating insight to the lives of both of these extraordinary men, how they came together and the reasons why they eventually went their separate ways. He considers them both to be men of genius and amongst the most original and influential thinkers of the early to mid-20th century.

To summarise briefly from Wilson's text, George Ivanovich Gurdjieff was born in Alexandropol, then part of the Russian empire, sometime between January 13, 1866 and November 28, 1877; his exact birthdate, like the man himself, is something of a mystery.

His father was Greek, his mother was Armenian. After extensive travelling, much of it in early life, he became an influential spiritual teacher who argued that most people live their lives in a robot like condition, in a low state of awareness, akin to hypnosis, which he called "waking sleep".

Peter D Ouspensky was born in Moscow on 5 March 1878 and grew up among the Russian intelligentsia of his day. He became a successful journalist and travelled extensively in both Europe and the United States between 1908 and 1912, during which time he appears to have undergone a profound mystical experience, a sensation so powerful that it was to influence the rest of his life. He rose to celebrity status after his book, a philosophical treatise: '*Tertium Organum*' was published in 1912; it became a best seller. His reputation was further enhanced by '*A New Model of the Universe*' which appeared in 1914 and a compelling autobiography written as a novel; consult Ref [2]. In the same year, he realised his ambition to travel to India. Ouspensky seemed intent on finding an esoteric school of 'real' philosophical knowledge and a master teacher. He finally appeared to have succeeded upon returning to Moscow in 1915 where he met up with Gurdjieff.

Ouspensky subsequently studied the Gurdjieff System under the latter's personal supervision for a period of some ten years until 1924 after which they separated when Gurdjieff founded his Institute for the Harmonious Development of Man in France. Ouspensky, for his part, set up his own organisation in London: The Society for the Study of Normal Psychology which subsequently became known as the Study Society. The most intriguing part of Colin Wilson's combined biographies is the last chapter in which he explains what went wrong for both Ouspensky and Gurdjieff; the former drank himself to death, the latter died of excessive alcohol consumption coupled with overeating and exhaustion. The author argues that this is somewhat easier to answer in the case of Ouspensky who appears to have become frustrated and eventually disillusioned at his inability to find a reliable way of breaking through to the higher levels of consciousness. This was in spite of spontaneous mystical experiences in earlier life which must have convinced him that such radically different states of awareness exist and can, to some extent, be summoned at will. Wilson suggests that the reason for this failure was a tendency on Ouspensky's part to over-emphasise 'super effort' and 'intentional suffering' coupled with an overly pessimistic nature which compelled him to drink too deeply of the darker aspects of Gurdjieff's doctrine. Both became overly concerned, to the point of being obsessed, with what was *wrong* with people instead of focusing on realising their hidden potential and innate creativity by appropriate application of attention driven by enthusiastic interest and a positive life affirming attitude.

Colin Wilson also indicates that Ouspensky wanted to turn Gurdjieff's teaching into an intellectual system which is to miss the point that genuine understanding involves finding the right way to 'shake' the mind awake. The author also makes a strong case for his contention that both Gurdjieff and Ouspensky failed to appreciate the importance of vitality and optimism–the sense of child-like wonder of the world–and gratitude for simply being alive. Wilson claims that our life energy leaks

away too easily, leaving us tired even to the point of exhaustion. The author argues that the basic problem of human existence is a tendency–through habit–to take what is miraculous for granted and, as a result, a fail to perceive the 'new' and fresh on a moment to moment basis. This propensity towards 'familiarity breeds contempt' is particularly noticeable as we grow older. To counter it, Wilson insists that newness is the recognition of difference and this imparts energy as opposed to a state of fatigue that is engendered when we see the 'same old same old' with a feeling of 'here we go again'. Unfortunately, Ouspensky overlooked this vital point because of his basically pessimistic outlook. So, all of his emphasis on self-remembering, self-observation, insights into human mechanicalness and super effort ultimately counted for so little that he became a sad disillusioned old drunk, convinced that Gurdjieff's system had failed him.

Wilson takes the argument further by suggesting that there is a strongly pessimistic component to normal everyday human perception which takes the form of a kind of 'free floating anxiety', as he puts it, and this so often leads to expression of negative emotions–including a feeling of meaningless–which, in turn, lead to leakage of energy and hence fatigue, discouragement and further pessimism. To combat this negative feedback loop, we have to learn to focus our attention by pouring our heart and soul into whatever we are interested in doing. The author stresses that to do *anything* with enthusiasm and conviction re-charges our batteries.

In order to reinforce his point, Wilson introduces an interesting model of human consciousness in which he distinguishes seven basic levels, ranging from deep sleep to the mystical experience of universal oneness. In other words, he seems to agree with Jung in asserting that the most effective way to liberation is by harnessing our innate creativity and, in the so doing, accessing energy from the unconscious from which we typically distance ourselves through unnecessary pessimism and negativity. It is interesting to note that the Quantum activist: Professor Amit Goswami makes much the same point in his latest book, consult Ref. [1]

All in all, I would strongly recommend this compendium to anyone interested in learning more about the lives of two of the most extraordinary truth seekers of the 20th century.

References:

Amit Goswami PhD: *Quantum Creativity* (Hay House 2014) (ISBN: 978-1-78180-015-7) - available from Amazon.

P. D Ouspensky: *Strange Life of Ivan Osokin*. London: Faber & Faber, 1948 - available from Amazon.

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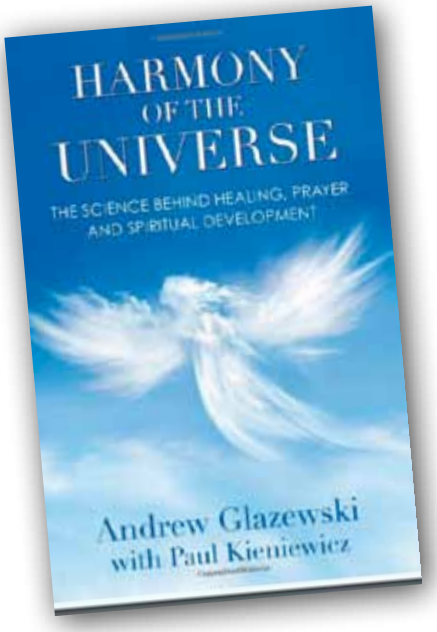
Patterns of Proportion

David Lorimer

HARMONY OF THE UNIVERSE

Andrew Glazewski with Paul Kienievicz (SMN)

White Crow Books, 2014, 189 pp., £14.99, p/b – ISBN 978-1-910121-00-9



As explained in Paul Kienievicz's article in this issue, Andrew Glazewski played a critical role in the development of the Network by bringing George Blaker and Patrick Shackleton together. Please read his article before continuing if you have not already done so. He was also a close friend of Sir George Trevelyan (also of Bruce MacManaway) and lectured many times at Attingham Park. Paul first encountered Andrew at a retreat over 50 years ago, where he introduced young Catholics to a more mystical approach to self-understanding. He was a physicist, healer, mystic and priest, all of which capacities are represented in this volume of talks and interviews. It is clear that he arrived at his deep understanding of life based on his own experience, and communicates this very clearly to others.

Two fundamental concepts are those of musical proportion and fields. For Andrew, the primary field is the soul in an Aristotelian sense of an organising field. This provides the organisation of the body. The secondary field is emitted from the body and includes emotions. We are each a station emitting a unique pattern, and if we want to tune into another person, we need to tune into their pattern. He also believes that this pattern is everywhere. He sees the brain and body as a radio transmitter, commenting that your body is actually inside you and that you can change your point of view to that of the field. Other beings such as angels are also patterns of proportion in this philosophy.

A number of chapters give instructions on how to develop field awareness. The imagination plays a crucial role, and Andrew is imbued with the philosophy of New Thought and Norman Vincent Peale. In prayer, he imagines himself flooded with spiritual life so that gradually the imagination is formed according to this light, bringing not only knowledge but also love – this energy must then be used for the good of others. He formalises this process as the Love-Light Technique for the expansion of consciousness, illustrating this the diagrams of triangles whereby perfection is represented by the interpenetrating Star of David. It is important to expand both in terms of light and love. Light also means understanding and we gradually come to see ourselves as a being without limit. There is a specific chapter on meditation in which we plunge deep down into the ground of our soul where God dwells within us. We must first relax, then carry out the Love-light technique and sink into silence, 'for only in the heart of silence will you find God. Meditation is communion with the Supreme.'

Another theme is love, sex and marriage. Sex represents the natural life force and is as sacred as God. Love is understood in terms of resonance between two patterns of life that set up a reciprocal circuit for the circulation of energy (also radiation). Andrew draws on the work of Rudolf von Urban and includes a couple of fascinating case histories about the flow of energy in which partners can solve each other's blockages. He also sees marriage as being about the creation of spiritual children through the circulation of energy and encourages the reader to move up an octave to the level of spiritual communion of your field with God. He sees the Eucharist as an aspect of marriage, encouraging communication and exchange not only with conscious beings but also with plants. He relates a fascinating experience of blessing a plant and asking to be fed by it, which left him fizzing with energy.

The title suggests, harmony is a very important principle for Andrew, springing as it does from musical proportion. So there is a distinctive music in crystals, plants and human beings illustrated through the work of Hans Kayser, which I had not come across before. Thoughts and emotions have an important effect on the physical system including on the respective vibratory patterns of molecules accumulating in the body – hence our character is also reflected in our body and movements. Along with Harold Saxton Burr, he distinguishes between life and thought fields - this is a book I read many years ago. Andrew comes across as a man of deep wisdom and compassion, someone I wish I had known myself, and I imagine many other readers will feel the same when they have read his book.

psychology-consciousness studies

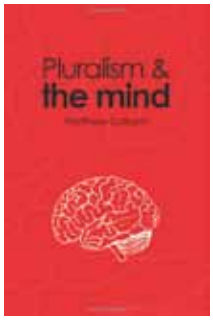
The Limits of the Possible

David Lorimer

PLURALISM AND THE MIND

Matthew Colborn (SMN)

Imprint Academic, 2011, 310 pp., £17.95, p/b – ISBN 978-1-845-402211



This impressive book provides a thorough overhaul of consciousness studies in both philosophical and psychological terms. Broadly speaking, it argues that conventional reductive materialism cannot be sustained and makes the case instead for what Matthew calls emergent property pluralism. There are four parts: the first gives a thorough historical context, the second looks at philosophical considerations, the third at physicalism and its limits, and the fourth considers controversies and speculations. Although the first sentence says that the book is about the mind and its place in nature and in particular about the gap between personal experiences of consciousness and images of mind from cognitive sciences, the work of CD Broad (*The Mind and its Place in Nature*) is not cited and would have been a useful addition to the overall argument. Matthew begins with some examples, which leads the reader immediately into broad theoretical considerations, including the pervasive influence of scientism or what Sir Karl Popper called promissory materialism.

Matthew is right to say that consciousness is a function of worldview, and in particular of monism rather than pluralism, as one sees in the work of Christof Koch. This enables him to introduce his basic proposition that no single theory will prove definitive and that a plurality of approaches will remain necessary. The historical section refers to many key thinkers in the history of Western philosophy and especially to the pivotal influence of Descartes in formulating a mechanistic outlook on life, which many people forget is itself a metaphor. Then there are references to Mesmer, vitalism, TH Huxley and Darwin before moving on to psychology in the late 19th century with William James and Frederic Myers - in this section mention could also have been made of the contribution of Alfred Russel Wallace, whose logical demolition of Hume's *Essay on Miracles* is quite masterly. The legacy of behaviourism and the cognitive revolution come next so that the reader has a good grasp of the salient points informing the modern scientific worldview.

The philosophical section deals with ontology, epistemology and the problem of biological causation. It is good to see this treatment, and I agree with the author that the mind-brain issue is primarily metaphysical rather than empirical. He provides an excellent chart of different ontologies with their corresponding ideas on substance and the social principle. The main theories are treated in turn, including eliminative materialism, panpsychism, epiphenomenalism and identity theory as well as dualistic ontologies. In the chapter on epistemology, there is a good discussion of surface versus depth perspectives, which raises the question that most human capacities are not expressed in reducible structured ways that many models suggest. In fact, we have no reason to suppose that scientific models are exhaustive.

The third part begins with an analysis of the computational model of mind, considering the work of Igor Aleksander and the assumption by thinkers such as Steven Pinker who equates information-processing with thought. These models do not satisfactorily address the binding problem or the nature of autonomy. Readers will be aware that mainstream cognitive science believes that consciousness will eventually be understood in physical terms using some form of causal mechanical model as a boundary condition. The presupposition is that neural mechanisms underlie all subjective experiences, an assumption questioned by accounts of veridical near death experiences. Matthew identifies a number of limitations of conventional models, including problem of qualia, the passivity of consciousness, the focus on waking states and the total disregard or dismissal of parapsychological phenomena. He considers the relevance of quantum theories of consciousness, especially the work of Henry Stapp. The next chapter looks at the limits of neuroimaging and its underlying assumptions that the brain is modular, that mental functions can be localised, and that the mind is a neural code. These assumptions shape the output.

The fourth part begins by summarising the overall argument, asserting that a theory of consciousness needs to be a theory of subjects and should not be downgraded in favour of functional data and approaches. Various objections to subjective experiences are discussed and refuted and the author also considers relational approaches, including the Madhyamika school of Buddhism.

In the next chapter, he considers the thorny issue of teleology and various interpretations of Darwinism. This leads on to a consideration of the panexperientialism of Whitehead and evolutionary emergence. A good chapter on free will follows, where the author has some sympathy for an expanded version of compatibilism while concluding that current science and physicalism cannot handle the problem of mental and conscious causation. Myers' theory of personality is discussed in the next chapter along with the philosophical implications of deep self theories. One of the most interesting chapters probes the limits of the possible and one comes up against the author's own boundary of questioning evidence for some form of survival of death owing to his general view that mind and consciousness are primarily biological phenomena.

After giving some background to the field, he discusses three case studies relating to stigmata, past life memories of children and Ganzfeld experiments, examining the debates on the issues raised. This is part of a wider controversy over the status of psi, which has been going on for over 100 years. This also raises the question of survival versus super ESP, and his discussion of survival is not informed by the same level of knowledge of evidence as other parts of the book. He states that he has not seen anything that would make him think that any part of us survived beyond death and fails to mention, for instance, the work of the late David Fontana in this field. There is in fact a mountain of evidence for those who wish to consider it.

The concluding chapter asks if we could construct a one size fits all theory of consciousness and if we could, should we do so to the exclusion of other theories. The title of the book gives the answer to question, and the author observes that the mindless and meaningless universe exists only within the models of science. Each view has its own limitations that can be complemented by a plurality of approaches. He rightly states that many conceptual worlds remain possible within the constraining matrix of experience without being constrained further by physicalist assumptions. As I suggested at the beginning, this book provides a thorough overhaul of contemporary issues in the philosophy and psychology of consciousness studies and deserves a wide readership. It contributes to the reflective process and reformulation of the metaphysical assumptions underlying current conventional approaches to consciousness. One can only hope that some of the thinkers criticised in this book will read it.

Your Inner Labyrinths

Martin Lockley

IT'S ABOUT YOU: KNOW YOUR SELF

Chris Johnson (SMN)

O Books, 2013, 415 p. ISBN 1-978-1-78099-111-5 p/b UK £18.99, US $33.95

I have to admit I was initially somewhat reluctant to review *It's about you* (which is part I of a trilogy). I started with good intentions but after about 100 pages I was distracted by other more immediate pursuits. In fact I was in China, a particularly good excuse as I also was hunting dinosaurs, enjoying what my daughter's friend calls every seven-year-old's dream job! Nonetheless, I was later reminded of my obligation and with a slight prod from the editor, resumed the task, soon to find I was well rewarded. Initially, in that first 100 pages of *About You* I had learned that author, Chris Johnson, an SMN member, sets great store by channeled information such as is abundantly available from the *Seth Library* and similar sources. Having familiarised myself with some of this material, admittedly some years ago, I was receptive to Chris' description of it as "the bedrock wisdom upon which a new understanding of our Selves is constructed." But somehow, on my initial encounter, I was reluctant to embrace the message fully. Chris anticipates the caution of some readers who may regard channeled sources as "unsound." However, the proof of the pudding (and perennial wisdom) is in digesting it, not in whether the delivery system respects the known laws of physical science. It's about whether the message resonates with our inner intuitive senses, our "inner selves." *It's about you*, me, the human condition and what Seth calls *the nature of the psyche*. The mystery of the medium is another matter. If the homeopathic remedy works, 'tis good.

I often find myself rather astonished at how young the science of psychology is in relation to the millennia-long and turbulent history of the human psyche. In referring to our gut or intuition, we only very dimly recognise how much we depend on our inner senses, and how little we proactively and consciously, approach getting in touch with them. Nevertheless, while there are relatively few spiritually mature gurus (Jesus, Buddha) to guide us to develop these inner senses, we still hanker after wisdom, even if we are lazy in the practice of obtaining it. As Chris notes, Rudolph Steiner referred to these extra senses we rarely engage as our "organs of supersensory perception" and, like Steiner, Chris (and Seth) remind us that it takes practice, and a willingness to recognise, and avoid being ruled by, our more unruly psychic forces. In the tradition of an instruction manual (as in some of Steiner's books) Chris embellishes his text with exercises and reminders to repeat the message [in little boxes entitled; *say that again*]. The first of these reminds us that **C**onsciousness with a capital '**C**' refers to "*the primal cause of all creation*, the religious equivalent of God," that which patterns energy into representations of ***Itself***. [Lots of original emphasis]. Your individual **c**onsciousness with a small '**c**' ('sciousness' if not shared!) is a non-physical expression of **C**onsciousness –called a *psyche*. How does this play out in practice? We each develop worldviews based on what society and other small 'c' consciousnesses *say again* and again into our impressionable consciousness. So…? say it again differently for a *shift* in consciousness. Capital '**C**' **C**onsciousness embodies the principle of ***Divine Love*** (say that again) and the principle of panpsychism in which all entities down to protons and electrons are 'conscious.'

Following this introduction much of the remainder of the book deals with what might be called the structures of **C**onsciousness and their relationships to the physical and non-physical you, exploring intent, purpose, identity, essence, various inner senses, the Natural Powers of Divine Love and Attraction, natural guilt, ego, personality, the mind and your conscious mind, thoughts, beliefs, truths, feelings, emotions, perception, fear and human love as a translation of Divine Love. It's all about your complex make up and the potential one has to navigate and explore these inner labyrinths. Jean Gebser said consciousness was an "ever present" wellspring. Chris says "The Source is always with you." It is the source of pure positive energy and intent driving all your actions so as to grow your consciousness, expand your Self-awareness and encourage your personality's full expression. In this sense our non-physical inner identity, essence and empathy for all being-ness is created as a potentiality before we come into the physical world. There are, Chris says, four areas within **C**onsciousness (objective, subjective, subconscious and transitional) the first two corresponding to the physical and spiritual worlds, and the latter two bridging these two areas by transfiguring non-physical into physical energy and vice versa. [The last, transitional, relates to death and is dealt with in books II and III of the trilogy].

To understand the non-physical you, the subject of part I of book I , we must recognise that **C**onsciousness is ubiquitous and that there are ultimately no boundaries between self and non self. We are like cells whose membrane walls are the surface of transformation to all outside or beyond. "We have yet to realise that …Source Energy, the equivalent of **C**onsciousness **I**tself… transforms from non-physical…into physical states." This seems intuitively reasonable if consciousness is the primary datum, but nevertheless Chris acknowledges that "the natural principles underpinning all existence are notoriously difficult… to understand." [You can say that again]! So as our inner selves organise inner sense information about probable realities, our ego-self filters override them through perception, thereby creating unintended realities that have little to do with our inner intent or potential. Our current belief systems do not encourage the involvement of these inner senses. We are not in touch with our subtle bodies, and so remain fettered by restrictive beliefs. These are our ego-self wants that lead to contrasting experiences relating to awareness of the desires of the inner self for more meaningful expression.

Chris explains thought is an electromagnetic vibrational signature, destined by the Law of Attraction to seek out "similar resonating frequencies." As **C**onsciousness is the foundational primary datum of all things, it generates in **I**tself, and in each of us, various creative intents that we dimly recognise as propensities, callings or destiny inclinations as teachers, spiritualists, innovators, reformers, exchangers, artists, healers, imagers or nurturers. Getting in touch with one or more of these intentions is often a healthy exercise in "finding your alignment."

A little beyond 100 pages in Part II, (still book I) the subject turns to the physical you. We learn that the outer self has three central psychological aspects, ego-self, conscious mind and personality, all ultimately in need of integration. Your ego specialises in interpreting what you perceive in the physical world, often over-identifying with itself to the detriment of the whole, and inner self. Next, personality is defined as "an electrically encoded counterpart to your ego-self," but capable of releasing itself from the physical field. Conscious mind, in turn, is just one of several minds chosen by your ego to deal with situations in the physical realm.

Part III, a major part of the book, deals with your creational keys to your physical experience. It first describes thought as a means for conscious mind to interpret information gathered by both inner and outer senses. But thoughts should not be taken too seriously: as Aristotle said "it's the mark of an educated mind to entertain a thought without accepting it." Nevertheless thoughts are powerful and can make you feel good or otherwise. Thus the psyche is a complex flux of integrating and disintegrating forces. Chris explains how thoughts grow (in personality) into beliefs, attitudes, values and truths. Using a garden metaphor these can be cultivated. Feelings (which consume energy) and emotions (which supply energy) are a powerful part of the mix and, especially as they always point to important information. But too often our egos tell our conscious minds to ignore our

feelings, leading to "abject confusion." Thoughts, feelings emotions and beliefs are independent, but complexly interacting, living systems.

The ego cannot rebuff the power of emotion, even if it may attempt to repress and thereby warp it. Thus "the entire subject of feelings and emotions is currently a very confused one in western thinking. But as Rudolph Steiner reminded us, human destiny involves facing problems. Human consciousness cannot know itself and what is preferable for existence "without the contrast provided by un-preferable creations." But there is a larger picture in the shift of consciousness underway to remember "that Divine Love is the fundamental principle." We've only been pretending it is not there to see where our free will might lead us. So "all creations are there for a reason." And this alone is reason to appreciate our existence. Conversely, when you condemn anything, enemies, ideological adversaries, the world, it is not about the world, *it is about you*! [G.K Chesterton said the same when asked what was wrong with the world. He replied "I am."] This surely is perennial wisdom, channeled or otherwise. If we glean such wisdom from Book I, we may look forward to the potential of books II and III to help better know that "notoriously difficult" subject – ourselves.

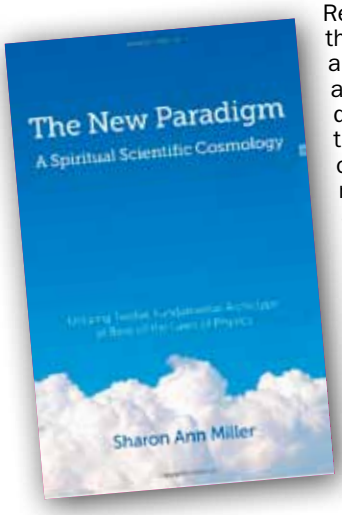
A Spiritual Scientific Cosmology

David Lorimer

THE NEW PARADIGM

Sharon Ann Miller

Iff Books, 2014, 428 pp., £18.99, p/b – ISBN 978-1-78099-967-8



Readers of this Review are likely to be among those questioning the adequacy of the mechanistic and materialistic scientific paradigm that currently dominates our culture. The purpose of this impressive and closely argued book is to provide a new spiritual cosmology based on astrological principles incorporating both science and philosophy. It is not an easy read, but the task of metaphysical reconstruction is carried out in some detail. There are eight chapters in the first part setting out the basis of the new paradigm, explaining the astrological category system and then with chapters on spirit, science, soul, creative spiritual powers, matter and God. The second much shorter part explains the language of astrology and how to read a chart.

Whitehead famously said that Western philosophy is a series of footnotes to Plato, and the continuing tension between the approaches of Plato and Aristotle is reborn in every generation with occasional attempts to reconcile the two. As a whole, the book is a formulation of panentheism that also draws on the central insight of New Thought, that God is both immanent and transcendent, that each person is divine and therefore has the capacity to create their lives and circumstances. This hands us back freedom in a deterministic world. Astrological cosmology affirms the existence and primacy of spirit while maintaining that matter is produced from the substance of spirit and is not inherently opposed to it. An important basis for this new system is an explanation of the nature of truth as consistent and enduring, coherent, sound, simple, exhibiting patterns and regularity, beautiful, comprehensive, embodying reality and fruitful; as a result of these features, it is argued that truth furthers the good and has the power to transform the world. It also corresponds in a dynamic sense to Dharma, Tao or the Way.

The astrological category system using the twelve houses, principles, archetypes or universals forms the kernel of the book and these are subsets of an overall unity of being. Being is manifested in a descending series of expressions from spirit to soul to matter in a language of light. This is all clearly explained in a series of diagrams with corresponding correlations with physical principles (pp. 85-87) and a division of domains into kinematic (motion), space (quantification) and qualification. Within the first, we have action, force, the first and third laws of motion; the second contains spatial extent, content, junctures and division, while the third exhibits the laws of evolution, thermodynamics, hierarchy and qualitative divergence. These dimensions are then explored in some detail along with the corresponding twelve types of unity.

Spirit in its pure form is defined as infinite, absolute and eternal Being-Unity; these terms are often associated with the concept of life as a power of active unification and sustaining systems in being in an overall tendency towards wholeness. Mind is understood as a spiritual substance characterised by awareness but different from thought. One catches an echo of Teilhard de Chardin in the idea of evolution moving towards greater differentiated unity and wholeness as the material expression of pure Being-Unity. Within ourselves, this is experienced as our self-understanding as centres. The well-informed chapter on science covers the history of physics (the nature of light, relativity and quantum theory, Bohm's quantum potential), and the various paradoxes thrown up by different schools and views.

Soul is understood as our core identity as well as a formative principle or formal cause characterised by wholeness (whose various features are elaborated). Both Soul and Spirit are understood not just as substances but also as powers, hence as causes - this leads to a detailed discussion of the four types of Aristotelian causality within a modern context, drawing on work in developmental biology. In a consideration of free will and determinism, the author regards the astrological chart as a probability field representing our character and inherent tendencies.

The last two chapters elaborate the nature of matter as a set of relationships and the author's personal concept of God, bringing the argument back to the advantages and disadvantages of a panentheistic philosophy that sees every expression of life as both a part and a whole (holon). At the end of this long argument, the author restates the importance of knowing who we are and its consequence that, as microcosms and instruments of divine creativity, we can live up to our true potential, transforming both ourselves and our collective world. This is a reasoned optimism based on a very extensive philosophical analysis. This may at first sight seem an unlikely synthesis, but the thoroughness with which the author carries her arguments through bolsters the plausibility of her case, setting out one of the most comprehensive metaphysical systems I know.

Survival in Iceland

Guy Lyon Playfair

THE DEPARTED AMONG THE LIVING – An Investigative Study of Afterlife Encounters

Erlendur Haraldsson (SMN)

White Crow Books, 2012. 264 pp. p/b. £11.99. ISBN 978-1-908733-29-0

This author, emeritus professor of psychology at the University of Iceland, is no armchair academic, but one of the leading collectors of spontaneous cases of his time, notably of those suggestive of reincarnation collected on his many field trips to Sri Lanka and Lebanon. As his new book indicates, he has not overlooked the abundance of psychic phenomena to be found in his own country, where a recent survey revealed that nearly two thirds of Icelanders accept the reality of survival of physical death, one in three of these claiming to have had personal experience of some kind of contact with a deceased person, as described by one of the 449 respondents to his public appeals:

'I sat in a chair in my room and was reading. Then I looked up

and saw my deceased grandmother standing in front of me, as fully

as when she was alive. I told my mother about this the following day. She said 'That is nice. It was her birthday yesterday.' I had not

remembered it.'

The deceased are experienced in several ways, it seems, not only by sight but also by sound, smell or touch or just the sense of presence. Evidence also comes from animal behavior, and from some of Iceland's celebrated mediums, notably Hafsteinn Björnsson, yet the most persuasive cases of all are those in which there was a witness whom Haraldsson was able to interview. In one of these, a man recalled being woken up by his wife after she had had a disturbing vision of a patient at the sanatorium where she worked, whom she had invited to visit her later that day. She told him she had seen the man open her bedroom door, noticing that his face was covered in blood, and adding 'I swear that something has happened at the sanatorium'. She duly rang there in the morning and was told that her patient had committed suicide during the night by jumping from a bridge. According to the post mortem report, there were large cuts on his head. It is cases of this quality, of which there are several, that make alternatives to the survival hypothesis seem implausible.

Some of Haraldsson's findings confirm those reported by Edmund Gurney and his colleagues from the Society for Psychical Research in their classic *Phantasms of the Living* (1886). For example, the percentage of apparitions whose death had been a violent one (28) was more than three times the national percentage (eight), exactly the same ratio as that reported by Gurney. Apparitions tended to be seen within 24 hours of death, and in many cases they were of persons either not known to the percipient or known but not known to have died. One can hardly disagree with Haraldsson's modest conclusion that

'When all the accounts we have collected are considered, it seems impossible to reject all of them as deceptions and mistaken perceptions. Something real is there, at least in some of the accounts.' It is good to be reminded how much original evidence would be lost were it not for researchers such as the 19th century pioneers of the Society for Psychical Research and their successors such as this 21st century author, who have been prepared to go and look for it and preserve it for posterity. This is an important collection of well documented evidence for a post-mortem existence.

Guy Lyon Playfair** is the author of twelve books including **This House is Haunted** and **Twin Telepathy.

Medical Ethics - a New Way to Accept the Inevitable?

Eric Franklin

THE WISDOM OF NEAR-DEATH EXPERIENCES

Penny Sartori

Watkins, 2014, 236 pp., £10.99, p/b - ISBN 978-1-78028-565-8

This review of the new book 'The Wisdom of Near-Death Experiences' by Dr Penny Sartori is based on two complete readings of it. The book is written approachably, and is noticeably free of typographic errors. It has copious references, all presented in a full scholarly manner, but more important is that a second reading reveals the book's slightly unusual plan and social purpose. It brings into prominence the different aim of the writer, as contrasted with many other authors writing on the topic of personal and conscious experience. Whilst to the outside observer, the subject appears to be no longer alive, yet is in fact very much alive. That there can be such experience at all raises very important questions about the nature of our being-alive, but Dr Sartori's aim is not to prove that we remain alive at a time when outside observers think we are dead, but rather to argue that since humans all die eventually, yet seem to be still alive when they do so, it is our attitude to dying which should change, and therefore also our medical practice at the time when we conclude that our bodies are worn beyond repair and are best discarded. Many will recall that Einstein produced his Special Theory as a result of just such a reversal of the habitual thinking.

The book begins conventionally enough, with an account of an experience which grips the attention of the reader. Thereafter, throughout the book, the matter of near-death experiences is dealt with not simply case-by-case, as in many other books, but aspect by aspect as the author brings out a point relating to her main thesis here, and another point elsewhere. As a result, the book is very rationally constructed, and is far more than a sensational account of experience after experience, but without purpose. Dr Sartori's purpose is to influence medical attitudes and practice. Notwithstanding that her main point is that we should change those attitudes and practice, Dr Sartori does provide an epigraph to her very first chapter from Larry Dossey, firmly stating the view that we are immortal. I believe we, her readers, may take it that she agrees that we are probably immortal-in-our-innermost-essence, but is not writing yet another book to prove it. Instead, she notes that NDEs change lives, priorities, and even personalities, emphasising a similarity when she finds it in a number of cases in a chapter devoted to one or another feature of many NDEs. Thus she deals in some detail in chapter 2 with the after-effects of an NDE, turns to childhood NDEs in chapter three, cultural variations in the content of NDEs in chapter 4, and so on, often referring to a case described earlier in the book to bring out a new line of thought. And thoughtful is indeed an apt description, for her argument is grounded in more than two decades of professional experience in the field of care of the dying. Her view is one of which we should all take very careful note.

With the ground thoroughly prepared in this way, Dr Sartori begins to turn towards her main argument in chapter eight, showing us that thinking about death has changed over the centuries, which implies that it can change again. Then, in chapter nine, that main argument appears clearly and in detail and so makes a valuable addition to the literature on the subject. At this point I shall bring this review to an abrupt end, for one should not rely on a mere review to glean an impression of any book's content, but, following the reviewer's recommendation, buy it and read it for oneself. The unique thrust of this book makes it well worth doing so.

***Eric Franklin**, whilst almost certainly distantly related to Benjamin, is an autodidact maverick with no respect for persons, but an infinite respect for truth.*

Science or not science – does it matter?

Gunnel Minett

JUNG AND THE QUESTION OF SCIENCE

Edited by Raya A Jones

Routledge, 2014, 191 pp., £28.99, p/b - ISBN 978-0-415-64414-3

In this book, eight scholars contribute their thoughts on Carl Gustav Jung's work and whether or not it can be classified as science. The authors are Joe Cambray, Terence Dawson, Peter T Dunlop, Byron J Gaist, Leslie Gardner, Mark Saban, Robert A Segal and Raya A Jones who is also the editor of the book.

Jung always described himself as a scientist and his work as scientific. As the book points out, the English word *science* has a slightly more limited meaning than the German word *Wissenschaft*. This German word can be directly translated into the Swedish word *vetenskap* that means *the development of hitherto unknown objective knowledge with systematic methods*. The English word science that can be defined as: *a systematic enterprise that builds and organises knowledge in the form of testable explanations and predictions about the universe.*

Given that the English definition also includes '*testable explanations*' it is understandable that Jung's view of science has been questioned, in particular by Anglo-Saxon scholars. Although Jung was methodical in his research his conclusions were not always based on empirical facts in the way required in the Anglo-Saxon world. Jung often arrived at his conclusion from meditating on his own experiences, and comparing them to his patients' experiences, rather than objectively drawing his conclusions from case histories.

Whether or not this can be regarded as science in the Anglo-Saxon world is a question that can be discussed in depth and has been over the years. This book illuminates the problem with a spectrum of views, both for and against. The overall conclusion is that Jung has, at least, contributed to the understanding of human psyche, in particular by adding the aspects of emotions and dreams to psychological research.

Above all perhaps, Jung's unorthodox research methods illustrated the problems that emotions and personal beliefs bring to the field of psychological research. Although it may not be good science as such, to ignore emotions and beliefs, as many scientists have attempted over the years, will never fully reflect the human psyche. Even if it makes the results messy and questionable from a scientific point of view, accepting the fact that human beings are guided by emotions, dreams and beliefs is necessary if we want to reveal the full picture, although it makes us far less predictable as study objects. Modern views in consciousness studies clearly point in this direction.

Another 'side-effect' of drawing a strict line between scientific and non-scientific studies is that it has open up to a wide range of self-styled gurus teaching in a very popular way and attracting many followers. This is not to say that they have a similar empirical base from which they draw their wisdom as Jung had. Even Jung is often ascribed a guru status by his followers, meaning that his words should not be questioned. As a member of a Jungian circle for many years with many questions to ask about Jung's conclusions, I often found this to be the case. My personal hope is therefore that the question of the scientific status of Jung's research will spill over to a wider discussion of where to draw the line regarding scientific/nonscientific research. A discussion that is, perhaps, bound to emerge given the constantly growing understanding of the human psyche that modern research is producing.

ecology-futures studies

Looking Back from 2050

David Lorimer

THE WORLD WE MADE

Jonathon Porritt

Phaidon, 2013, 318 pp., £24.95, p/b – ISBN 978-0-07148-6361-0

In the International Futures Forum, we occasionally use an imaginative technique to look back on how we have actually solved a pressing challenge. Our normal way of thinking is to look forward and think of all the reasons why certain strategies will not work, which leaves us with a sense of powerlessness. The rules for this game are to assume that you have in fact resolved the challenge and then describe how you actually did it without mentioning the obstacles in the foreground 'the difficulty was…etc'. This is what leading environmentalist Jonathon Porritt does in his new book, which is the story of a teacher, Alex McKay, looking back at the age of 50 from 2050 and describing how our major social and environmental challenges were met, bringing the world back from the brink of collapse. This is a hugely ambitious intellectual undertaking, and Jonathon covers a vast range of interconnected issues with humour and aplomb.

A chart at the beginning of the book conveys some idea of a potential and plausible trajectory of events: we have water riots in the Middle East in 2017, cyber terrorist attacks on nuclear reactors in 2019, Internet wars during the 2020s, the Kiev Treaty on nuclear decommissioning in 2022, the great famine of 2025, the first commercial flights with 100% biofuels in the same year (I did wonder about that one), the European energy super grid in 2031, final evacuation of New Orleans in 2035, reconciliation between China and Tibet in 2041, and the worst year on record for climate change and disasters in 2045. As some wit put it, prophecy is uncertain, especially about the future, or, to quote John Kenneth Galbraith: there are only two kinds of economists: those who don't know, and those who don't know they don't know. However, Jonathon does his best to make an educated guess based on current projections, while recognising that unforeseen events may shape our future more than we can indeed know.

The 50 or so entries at different points in the book cover agriculture, food and water, biodiversity and the natural world, climate change, economics and finance, energy, health and education, politics and security, society and cities, technology and manufacturing, travel and transport - pretty comprehensive, as you can see. There are also numerous explanatory boxes and diagrams in a different style reproducing informal handwriting as well as some remarkable two-page photographs to illustrate potential breakthroughs in solar energy, transport, waste recycling and biomimicry, among other themes. The writing is both informal and informative, informed by a balance of idealism and realism, enthusiasm for some forms of technical progress and scepticism about others.

Here I pick out and comment on the few entries. On the population question, it is assumed that the 2050 figure will be 8.6 billion, which is on the low side and due to the success of a number of measures, including the projected revision of Catholic teaching by the Pope in 2016. The role of the Gates Foundation is also acknowledged in providing women with access to contraception. I was less sure about the projections for urban slums. I don't think the 2015 figure is as high as 2.5 billion (more like 1.3 billion according to *The Planet of Slums*), while the projection of 2.7 billion for 2050 may be nearer the mark. Jonathon times the introduction of an international financial transaction tax for 2014 and projects that it will be earning €40 billion a year by 2020. He sees a proportion of this going into a UNESCO global recovery programme and his projection is that every child on earth is attending primary school by 2035, with 70% staying on for secondary education. This would be an impressive achievement indeed.

Part of his vision for global healthcare is individual genome mapping, showing what conditions we are likely to be susceptible to and corresponding advances in drugs to target individuals more specifically. He does not neglect lifestyle changes, but the sheer cost of these high-tech interventions may drive governments more towards prevention and promotion of healthy lifestyles. He projects the replacement of GNP by a well-being index, the mandatory reduction of weekly working hours to about 25 by 2045 and the obligation on governments to guarantee a minimum amount of adequately remunerated work, arising partly from riots resulting from high youth unemployment in the early 2020s. He also sees an international movement mobilised by Avaaz and called *Enough,* putting immense pressure on governments to reform. By 2022, the world woke up to how little it had done on reducing carbon emissions over the previous 25 years and various botched efforts at geo-engineering (these are in fact already going on) were dealt with by the UN Security Council. Students in 2050 are largely designing their own e-learning programmes and every student takes part in various community projects.

The book provides a useful glossary of resources for readers who would like to take further action or research additional information. Jonathon provides his own contextualisation at the end of the book, commenting that the changes he envisages are unlikely to come about before 2050, even if many

of his environmental colleagues regard this as far too late. On the one hand, he admits to feeling very angry much of the time about the lack of progress on critical issues while at the same time being excited about the prospects for us learning to live sustainably. Alex puts this down partly to the Internet and its connectivity, but also to policies encouraging the growth of empathy and continuing innovation both in thinking and technology. The great merit of this stimulating book is in compelling the reader to consider various potential developments and ask what role they can play in helping bring these about, given that the window of opportunity for doing so will not remain open for ever.

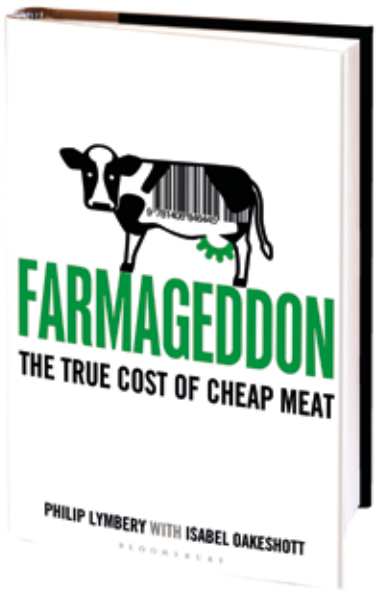
Animal Machines

David Lorimer

FARMAGEDDON

Philip Lymbery with Isabel Oakeshott

Bloomsbury, 2014, 426 pp., £12.99, p/b – ISBN 978-1-4088-4644-5



In 1967, dairy farmer Peter Roberts founded Compassion in World Farming, of which Philip Lymbery is currently chief executive. The more one knows about conditions in which most meat and poultry are raised, the less inclined one is to eat it. This book, as the title suggests, is about the true cost of cheap meat and takes a tour round the world to inspect various production facilities and the consequences for the ways in which they factory farm their animals, which in turn has implications for nature in general and our health in particular. Written in a journalistic style with vivid descriptions of the characters involved, the book provides an engaging and worrying insight into modern methods based on treating animals as production machines and putting profit before feeding people healthily.

Amounts of feed and antibiotics are scientifically calculated so as to maximise rates of growth. The reader learns that cows could not possibly produce the amount of milk they now do if they were only fed on grass. Beef cows naturally produce around 1,000 litres of milk a year while the UK dairy cow reached 5,000 litres 30 years ago and the average dairy cow now yields 7,000 litres and some up to 10,000 litres a year. This stretching nature beyond the limits necessarily shortens their life from around fifteen years to less than five. The cows are disposable and replaceable. The same logic applies to chickens, farmed fish and pigs. One section of the book deals with the implications of the vast amounts of waste produced by giant feedlots. These sometimes sit in stagnant, toxic pools that are in danger of overflowing and give off a terrible stench. In Brittany, for instance, pig slurry is dumped in fields and then runs off into waterways into the sea, creating algal dead zones. There are simply too many pigs for the landscape to support.

A further implication impacts on health as a result both of the crowding of animals, poultry or fish into tight spaces, especially when combined with the administration of antibiotics - partly for reasons of growth mentioned above. We are effectively incubating both antibiotic resistance and potentially lethal epidemics. Antibiotic resistance spills over into hospitals, as we have already seen. The authors cite one case of a swine flu outbreak directly traceable to the local pig farm and also increased cases of asthma among children resulting from air pollution.

One prominent theme is the lack of systemic thinking within this mechanical outlook. We have already seen how this applies to the generation of disease, but other examples are given. For instance, Mao ordered the mass slaughter of sparrows on a single day, which led to a serious explosion in insect populations that had previously been eaten by the sparrows. Monoculture invites disease through its very lack of biodiversity. One signal example is the growth of 80% of the world almond crop from 60 million trees in a huge and sterile area of California. Producers have to spend $250 million a year for bee pollination – 3,000 trucks drive across the United States carrying around 40 billion bees. For the authors, colony collapse disorder is a reminder of the extent to which we depend on ecosystem services. The very scale of operation here makes it vulnerable to a major disaster.

The chapter on GM asks if it is feeding people or factory farms. The major crops used in animal feed (30% of global cereal output, which could feed 3 billion people directly) are mostly genetically engineered: heavily subsidised corn, soya and rapeseed (also cotton, responsible for tens of thousands of deaths in India). Contrary to the hype, GM actually increases the use of chemicals. In 1990, before the arrival of GM, Argentina used 35 million litres of chemicals. By 1996, this had rocketed to 98 million and 145 million by 2000, rising to an incredible 300 million by 2010 - all to produce the same amount of crop and the direct consequence of weed resistance. This is elementary natural selection, and another example of the dangers of linear thinking in a systemic world.

As has been recently publicised, up to one third of the world's food is wasted at a time when 1 billion people are on the verge of starvation. One chart suggests that this may amount to 11.6 billion chickens, 270 million pigs and 59 million cattle - a sobering thought, especially when combined with the use of cereals for animal feed, which also comes from the unsustainable and highly polluting production of fishmeal. There are, however, solutions to these practices, part of which involves eating less meat (although reduction in the US and Europe is likely to be more than offset by growth in Asia). If we eat less meat, then more cereal can be eaten directly. We also need to think much more long-term about the sustainable health of the soil.

As consumers, our collective choices can make a real difference. We can buy organic and free-range products from animals reared on the land, favour local producers and retailers, reduce our food waste and avoid overeating meat, as I imagine many readers already do. It is important to remember that there is a story behind everything we eat, which is so graphically illustrated in this eye-opening book. We also need a change in our thinking and consequently in our practice away from mechanistic and exploitative approach to our animals, although the intense level of competition and current scale of operations makes this difficult to achieve in the short term. It will require pressure from below and sensible regulation from governments to create a level playing field internationally. Readers can also think of joining the Food Revolution Network or supporting Compassion in World Farming.

general

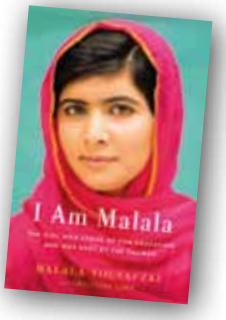
Speaking Out

David Lorimer

I AM MALALA

Malala Yousafzai with Christina Lamb

Weidenfeld and Nicolson, 2013, 276 pp., £13.99, p/b – ISBN 978-0-297-87092-0



The title of this remarkable account comes from the incident in which Malala was shot by the Taliban on a school bus in October 2012. A terrorist boarded the bus and asked who was a Malala, and this was her reply. She was shot through the head and the other two bullets wounded her friends sitting next to her. I bought this book in Belfast airport because so many young people had written about Malala as an inspirational figure in this year's Inspire> Aspire poster awards, more than anyone else except Nelson Mandela. I thought I ought to know more about her story.

The book begins with her family background and the importance of her father as an educator and activist. Descriptions of conditions after floods, earthquakes and attacks by the Taliban bring home the enormous challenges faced by Pakistan and the effects on everyday life. Education, especially for girls, is the passport to a successful professional life and emancipation. The Taliban were determined to stop this and in the process destroyed over 400 schools – a track record in some respects worse than the Inquisition, and quite incredible to the liberal western mind. Malala describes how the Taliban took their music, their Buddhas and their history, and in particular the influence of a local radio station calling for all kinds of militant destructive action. This culminated in a ban on girls attending school.

Malala felt she had to speak out and began a widely read blog. Her inspiration was Benazir Bhutto, who was herself assassinated. At the time, Malala asked herself why she did not go out and fight for women's rights and was galvanised to do so. She thought to herself that if one man can destroy everything, why can't one girl change it, praying to God every night for strength to pursue this goal. She was also inspired by Anne Frank, and her exposure through the BBC made her realise that the pen can be much more powerful than machine guns, tanks and helicopters. She was learning how powerful we are when we speak. Throughout all this, her father had considerable financial challenges as the closure of his school meant that he still had to pay his teachers without any income. They also had to leave their village and become internationally displaced persons.

Gradually, her work began to receive recognition, for instance through the award of a peace prize by the Pakistani government on the recommendation of Archbishop Desmond Tutu. This increased her resolve to become a politician and make a further difference. Her father realised that he was in danger, but little did he think that his daughter was as well, so that when she was shot, he felt responsible for encouraging her to speak out. However, this was her own conviction. The narrative moves on to describe the shooting and its extraordinary aftermath with the outrage in the international press and the enormous help given to transfer her to a hospital in Birmingham where she would receive the necessary treatment.

Malala now feels she has been given a second life and can dedicate herself to the cause of girl's education around the world. There are currently 57 million children not in primary school, 32 million of them girls. In Pakistan this figure is 5.1 million and there are almost 50 million illiterate adults, two thirds of whom are women. In a message to the UN in New York, she urged world leaders to provide free education to every child in the world: 'let us pick up our books and pens, they are most powerful weapons. One child, one teacher, one book and one pen can change the world.' For this she received a standing ovation. Interested readers can support the Malala Fund (www.malalafund.org). The story can also inspire us to speak out about the issues on which we are most passionate, and future education of girls is one such critical issue for the future.

A Virtuoso Life

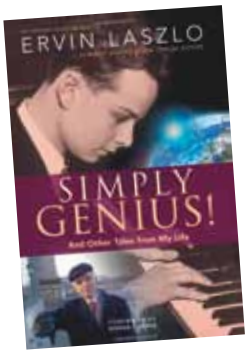
David Lorimer

SIMPLY GENIUS

Ervin Laszlo (SMN)

Hay House, 2011, 283 pp., £10.99, p/b – ISBN 978-1-84850 337 3

Most readers will be familiar with Ervin as a systems philosopher, holistic thinker and founder of the Club of Budapest. In this book of autobiographical episodes, readers will learn a great deal more about his background and especially about his earlier career as a concert pianist. He was taught by his mother and made his debut the age of nine. At that stage he didn't know how to read a score, but could play a piece after listening to his mother play it. He writes about living himself into the music, which was also critical during his performances. He was able to absorb the music through his whole being. He remembers how, on his 10th birthday, his father came home with a recording of Beethoven's Apassionata sonata by Wilhelm Backhaus. He wanted to play it, but his mother said it was a piece for grown-ups, but she eventually agreed to teach him and he was able to learn the first movement in a few days. His mother then took him to Professor Arnold Skekely of the Liszt Academy of Music who listened to him playing the piece and remarked at the end 'simply genius!' - hence the title of the book, which has been a motto for Ervin's life every time he has faced the prospect of some improbable undertaking. Eleven years later, he met the great man himself and asked him to play the first movement, which he duly did.



Ervin gives vivid descriptions of his life during the war and the horrendous conditions that people had to endure. His parents were worried about his safety, said one point it was agreed that another family would be paid to adopt him. This ordeal only lasted a month before he was able to come back home, but here he witnessed some heartrending episodes, especially a young wife raped by soldiers and her husband subsequently committing suicide by jumping out of a fourth floor window. An important early influence on his life was his uncle Pippa, who encouraged his young mind on long walks. He himself recognised the miracle of existence and felt that people should search out their true mission in life.

He describes his experiences with various piano competitions, eventually winning a major one in Geneva at the age of 15 and then going to spend some time in Paris with his mother. Here, he lived in an aristocratic department and had his first experiences of playing with an orchestra (he had played the Emperor Concerto during the finals of the Geneva competition.) Eventually, they receive an invitation to New York, where he makes another triumphant debut that really launches his concert career. However, he also describes the inner struggles he went through and his early experiences of life in the wider world. Marriage and the family eventually bring him to a turning point, prompted also by losing his focus during a concert and wondering exactly which part of the movement he had already played. A Dutch publisher expresses interest in his work and he eventually decides to go to Yale as a visiting scholar. As it happened, a skiing accident gave him the time to read and write, completing a book on Husserl and Whitehead.

From Yale he goes to Princeton and then to an assignment at the UN in New York. He is able to pursue his research for the Club of Rome and this leads to the creation of the Club of Budapest,

and, at a later stage the Giordano Bruno GlobalShift University. He explains that these institutions are designed to compensate the left hemisphere dominance of our culture with some right hemisphere emphasis. The purpose is well expressed in a manifesto from 1996 that expresses his view that we have a choice before us, which is fundamentally a choice of consciousness and value, given our planetary interdependence. More recently, he has written extensively about the Akashic field and its implications of science and consciousness. He has been fearless in his exploration of the frontiers of knowledge in this field.

On a more personal note, he describes the restoration of his farmhouse in Tuscany, which now forms the base from which he travels out to speak all over the world. An extensive annex reproduces the Worldshift Notebook that can be found online at www.ervinlaszlo.com. This summarises much of his recent thought about the limitations of the Western outlook and the need to adopt a more holistic and spiritual perspective that can be applied to our major global challenges. It is not simply a question of finding a better deckchair on the Titanic, but rather of formulating and implementing a new worldview based on planetary consciousness and cooperation. This is the work that many of us are engaged on and to which Ervin has dedicated his virtuoso life for many years. It is a truly inspiring story.

Review of "September 11 - The New Pearl Harbor." A documentary by Massimo Mazzucco.

David Ray Griffin

There have been several good films and videos about 9/11. But the new film by award-winning film-maker Massimo Mazzucco is in a class by itself.

For those of us who have been working on 9/11 for a long time, this is the film we have been waiting for.

Whereas there are excellent films treating the falsity of particular parts of the official account, such as the Twin Towers or WTC 7, Mazzucco has given us a comprehensive documentary treatment of 9/11, dealing with virtually all of the issues.

There have, of course, been films that treated the fictional official story as true. And there are films that use fictional stories to portray people's struggles after starting to suspect the official story to be false.

But there is no fiction in Mazzucco's film – except in the sense that it clearly and relentlessly exposes every part of the official account as fictional.

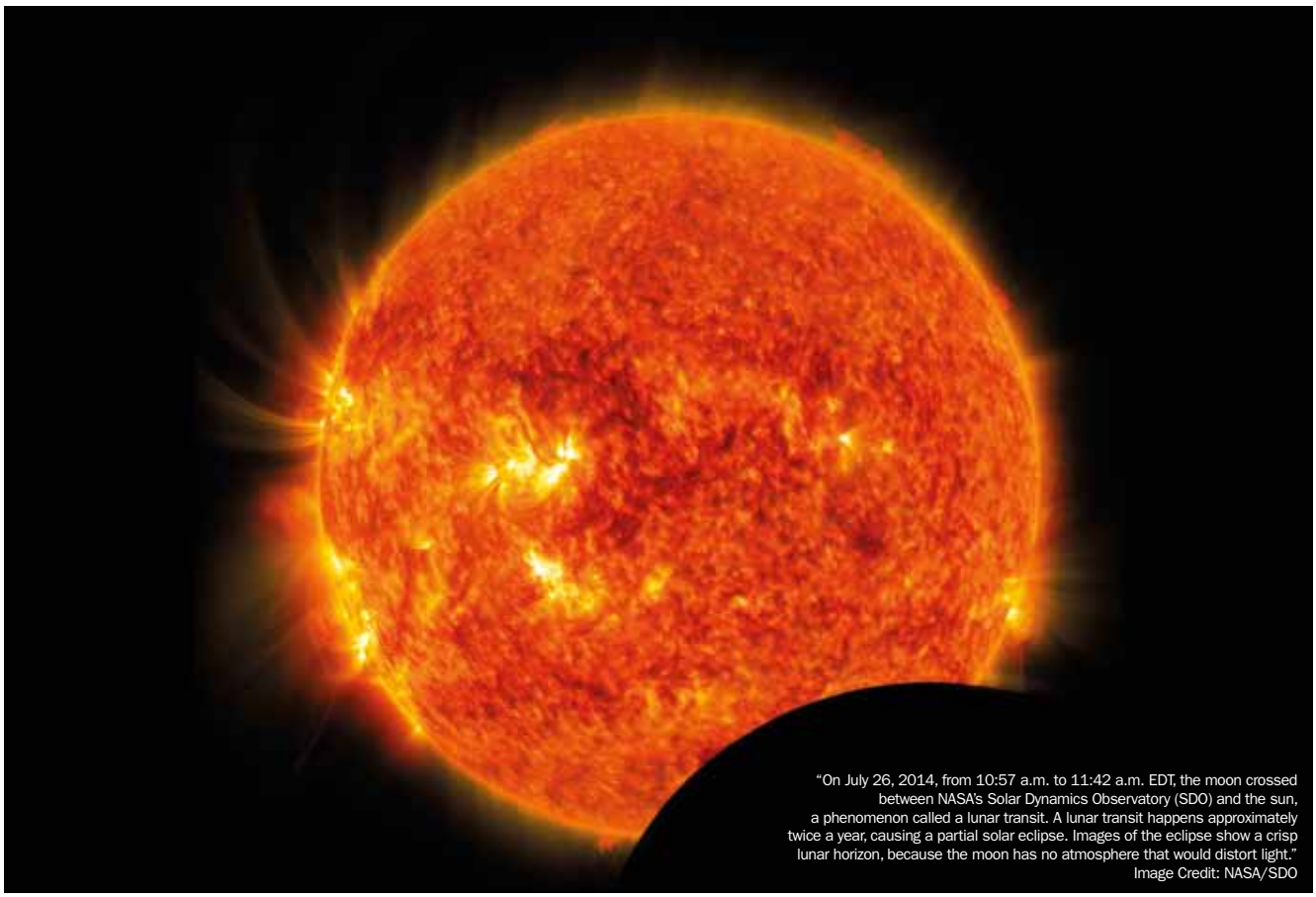
Because of his intent at completeness, Mazzucco has given us a 5-hour film. It is so fascinating and fast-paced that many will want to watch it in one sitting.

But this is not necessary, as the film, which fills 3 DVDs, consists of 7 parts, each of which is divided into many short chapters.

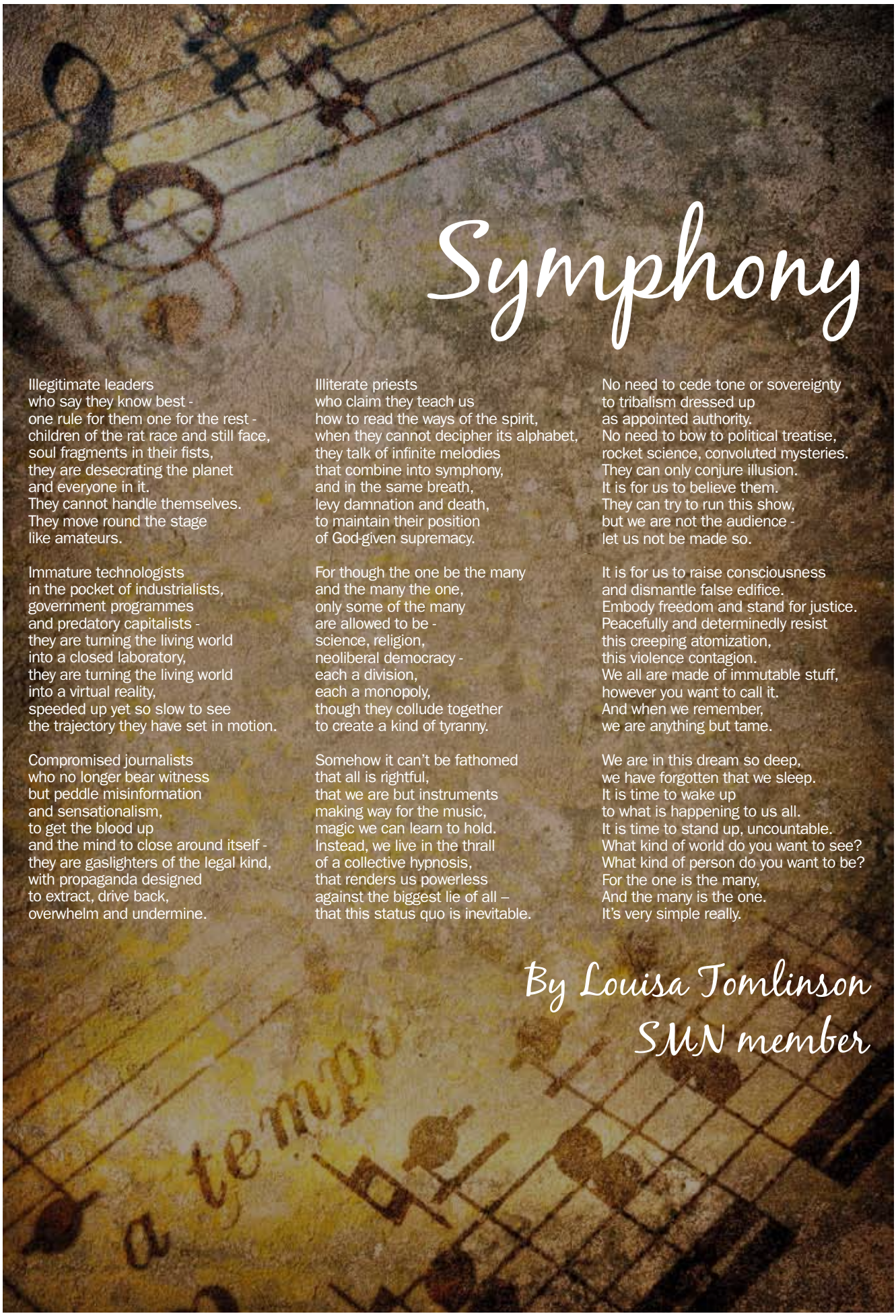
These 7 parts treat Air Defence, The Hijackers, The Airplanes, The Pentagon, Flight 93, The Twin Towers, and Building 7. In each part, after presenting facts that contradict the official story, Mazzucco deals with the claims of the debunkers (meaning those who try to debunk the evidence provided by the 9/11 research community).

The Introduction, reflecting the film's title, deals with 12 uncanny parallels between Pearl Harbor and September 11. The film can educate people who know nothing about 9/11 (beyond the official story), those with a moderate amount of knowledge about the various problems with the official story, and even by experts. (I myself learned many things.) Mazzucco points out that his film covers 12 years of public debate about 9/11. People who have been promoting 9/11 truth for many of these years will see that their labors have been well-rewarded: There is now a high-quality, carefully-documented film that dramatically shows the official story about 9/11 to be a fabrication through and through.

This is truly the film we have been waiting for.



"On July 26, 2014, from 10:57 a.m. to 11:42 a.m. EDT, the moon crossed between NASA's Solar Dynamics Observatory (SDO) and the sun, a phenomenon called a lunar transit. A lunar transit happens approximately twice a year, causing a partial solar eclipse. Images of the eclipse show a crisp lunar horizon, because the moon has no atmosphere that would distort light."
Image Credit: NASA/SDO



Symphony

Illegitimate leaders
who say they know best -
one rule for them one for the rest -
children of the rat race and still face,
soul fragments in their fists,
they are desecrating the planet
and everyone in it.
They cannot handle themselves.
They move round the stage
like amateurs.

Immature technologists
in the pocket of industrialists,
government programmes
and predatory capitalists -
they are turning the living world
into a closed laboratory,
they are turning the living world
into a virtual reality,
speeded up yet so slow to see
the trajectory they have set in motion.

Compromised journalists
who no longer bear witness
but peddle misinformation
and sensationalism,
to get the blood up
and the mind to close around itself -
they are gaslighters of the legal kind,
with propaganda designed
to extract, drive back,
overwhelm and undermine.

Illiterate priests
who claim they teach us
how to read the ways of the spirit,
when they cannot decipher its alphabet,
they talk of infinite melodies
that combine into symphony,
and in the same breath,
levy damnation and death,
to maintain their position
of God-given supremacy.

For though the one be the many
and the many the one,
only some of the many
are allowed to be -
science, religion,
neoliberal democracy -
each a division,
each a monopoly,
though they collude together
to create a kind of tyranny.

Somehow it can't be fathomed
that all is rightful,
that we are but instruments
making way for the music,
magic we can learn to hold.
Instead, we live in the thrall
of a collective hypnosis,
that renders us powerless
against the biggest lie of all –
that this status quo is inevitable.

No need to cede tone or sovereignty
to tribalism dressed up
as appointed authority.
No need to bow to political treatise,
rocket science, convoluted mysteries.
They can only conjure illusion.
It is for us to believe them.
They can try to run this show,
but we are not the audience -
let us not be made so.

It is for us to raise consciousness
and dismantle false edifice.
Embody freedom and stand for justice.
Peacefully and determinedly resist
this creeping atomization,
this violence contagion.
We all are made of immutable stuff,
however you want to call it.
And when we remember,
we are anything but tame.

We are in this dream so deep,
we have forgotten that we sleep.
It is time to wake up
to what is happening to us all.
It is time to stand up, uncountable.
What kind of world do you want to see?
What kind of person do you want to be?
For the one is the many,
And the many is the one.
It's very simple really.

By Louisa Tomlinson
SMN member