book reviews

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science-philosophy of science

A Spiritual Radical
David Lorimer

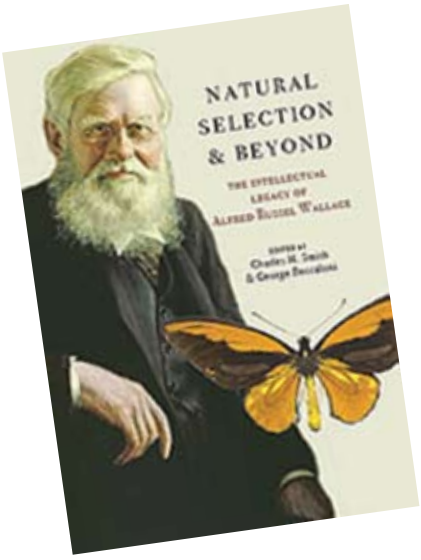
NATURAL SELECTION AND BEYOND
Edited by Charles Smith and George Beccaloni

Oxford, 2008, 482 pp., £30 h/b
ISBN 978 0 19 923916 0

Subtitled 'The intellectual legacy of Alfred Russel Wallace' this extensive collection of essays was launched at the Linnean Society at the end of last year at a conference organised by the Network and reported elsewhere in this issue. The famous joint presentation of the theory of natural selection by Darwin and Wallace took place at the Society in July 1858. Wallace lived another 55 years, and was hence able to celebrate the 50th anniversary of his paper in 1908, but his work has largely been forgotten and ignored in the intervening period - at the time of his death, he was arguably one of the best-known scientists in the world. I will come back to the reasons for this neglect below. The volume itself covers the full range of Wallace's activities, which were very considerable: his extensive fieldwork, geography, conservation, socialism, land nationalisation, anti-vaccination campaigns and spiritualism. This made him an anti-establishment figure, a spiritual radical who stood out independently against many of the trends of his time. In addition, he did not come from the upper echelons of society, unlike Darwin and many of his scientific contemporaries.

Beginning with his activities as a naturalist, Andrew Berry explains how both Darwin and Wallace were ardent beetle-hunters, a fact which predisposed them both to think in terms of natural selection. Beetles make up about a quarter of the 350,000 named species, which made JBS Haldane exclaim that the Creator must have an inordinate fondness for beetles. Wallace himself comments on this similarity with Darwin in saying that 'there is certainly no group of organisms that so impresses the collector by the almost infinite number of specific forms, the endless modifications of structure, shape, colour, and surface markings that distinguished them from each other, and their innumerable adaptations to diverse environments'. And since beetles cannot move very fast or far, numerous varieties are specifically adapted to these diverse environments. This interest is reflected in the number of specimens sent back by Wallace from the Malay Archipelago in the early 1860s. Staggeringly, they total 125,660, representing over 1,000 species; Of these, 310 are mammals, 100 reptiles, 8,050 birds, 7,500 shells, 13,100 butterflies, 13,400 diverse insects and 83,200 beetles.

The first section also contains essays on places where Wallace lived (this is a substitute for a straight biographical introduction), an analysis of Wallace's annotated copy of the Darwin Wallace paper on natural selection, which makes fascinating reading, work on species, sexual reproduction, the colour of animals, biogeography and the ice age. At the end of this section there is a very interesting contribution from Sandra Knapp which throws light on attitudes to conservation in the 19th century. Like many of his contemporaries,



Wallace put human beings at the centre, which was reinforced by his convictions on equity and social justice. One can't argue that he was a conservationist as such, but he would clearly have supported sustainable development and indeed deplored the way in which many habitats were being destroyed wholesale even then. He observed how forest clearance for coffee plantations resulted in much of the soil being washed away by tropical rains and proposed the creation of 'reserves' for the protection of the environment, adding presciently that in some places the creation of such reserves was 'absolutely necessary in order to prevent further deterioration of climate and destruction of the fertility of the soil'. Sociologically, he saw that the struggle for wealth was accompanied by 'reckless destruction of the stored-up products of nature, which is even more deplorable because more irretrievable'. One can only imagine how he would have felt 100 years on.

The second part looks at his work beyond natural science, covering his interests in socialism, eugenics, land nationalisation and spiritualism. Martin Fichman suggests that there is a correlation between Wallace's radicalism and his interest in Swedenborg and spiritualism. Unlike his contemporaries, Wallace insisted on the importance of final as well as efficient causes, seeing evolution in terms of a progression from physical to mental to spiritual in what he calls 'the progression of the fittest'. Darwin, Huxley and Lyell took a naturalist view, effectively equating the scientific approach with materialism in an effort to remove spiritual and final causes from the world picture. Programmes featuring Wallace towards the end of last year took a patronising attitude to his involvement with spiritualism or what we would also call psychical research. The usual discourse, repeated here to some extent, involves words such as conversion and believer, as if sceptics were not also believers in being disbelievers. They therefore seek to account for this so-called conversion by

factors which were not considered by Wallace himself. Wallace rejected the Anglicanism of his parents, insisting that he was a thorough and confirmed materialist, to such an extent that he could not at that time 'find a place in my mind for the conception of spiritual existence, or for any other agencies in the universe than matter and force'. He goes on to observe that facts are stubborn things and that in the case of his investigations, it was the facts that beat him: 'they compelled me to accept them as facts long before I could accept the spiritual explanation of them' because he could not find a place in his fabric of thought into which they could be fitted. The same applies to many scientists today. Wallace went on to fit these facts into a wider understanding of evolution.

His contemporaries, by and large, were unable to do this, as James Moore explains. The underlying metaphysic proposed by natural selection was to show that life, mind and morality are the outcome of uniform material processes. Hence miracles and mysteries are finished, and the new scientific culture will be secular. For Huxley, the term scientific meant investigating natural phenomena on naturalistic assumptions, in other words the argument between Huxley and Wallace was about what should count as science. For Wallace, being scientific meant investigating all alleged phenomena, 'even those deemed impossible or absurd'. Hence there was a social struggle about which view of science would prevail. In the event, it was materialism that triumphed, partly because of a court case involving a medium with whom Wallace had also worked. Interestingly, Darwin bankrolled the prosecution and the medium was convicted, leaving Wallace with egg on his face, even if this did not involve his own sittings. Before this storm blew up, Wallace had allowed a paper by WF Barrett (later Sir William Barrett) on thought transference to be read at the 1876 meeting of the Anthropology section of the British Association. This caused an uproar in *The Times* which seems uncannily similar to the rumpus created in 2006 when the Network arranged a meeting at the British Association including a paper by Rupert Sheldrake on telepathy. By 1878, Huxley was able to declare as the new chair of the Anthropology section that no member should travel outside what he defined as the lines of scientific evidence.

It is fascinating that the politics should be so similar after 130 years. Even now, Wallace's writings in these areas are well worth reading, for instance 'On Miracles and Modern Spiritualism' in which he has an amusing and devastating demolition job on Hume's essay on miracles. All this explains why Wallace has been ignored by the materialist establishment, but perhaps his influence will now increase, as people now try to find ways of integrating a more spiritual perspective into science and transcending the limits of dogmatic materialism, which can only be sustained by ignoring a great deal of evidence in the parapsychological literature. This book does indeed celebrate the intellectual legacy of a Victorian radical, but I would advise readers unfamiliar with his work to begin with Peter Raby's 2001 biography - *Alfred Russel Wallace. A Life* - which I reviewed at the time, before moving on to this more specialised volume.

The Miracle of Human Wholeness

Martin Lockley

FUNCTIONAL MORPHOLOGY

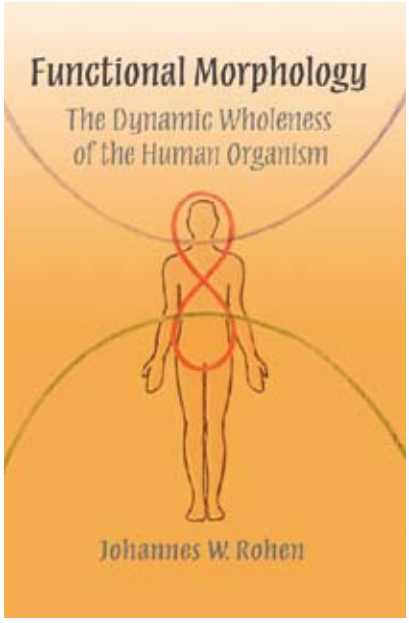
The Dynamic Wholeness of the Human Organism
Johannes W. Rohen,

Adonis Press, 2007, 429 pp., $75.00 h/b - ISBN 978-093277636-5

'To grasp the invisible delve into the visible as deeply as you can'.

Functional Morphology by Johannes Rohen M.D. is an extraordinarily impressive tour de force.

Not since I read *Man and Mammals*, by Wolfgang Schad and Developmental Dynamics by Jos Verhulst (Network 82) have I been so excited about the potential to gain a truly holistic and organic understanding of the human being as a dynamic physical, emotional, mental and spiritual being. The fact that all three authors develop the Goethean Science tradition is encouraging, not because I wish to tout the label, though I'm happy to do so, but because the tradition - the approach - is so fruitful. Researchers like Rohen, radically transform our understanding of holistic biology. Adopting such new perspectives may involve a little effort on our part to adjust our accustomed way of thinking, but the rewards are worth it.



Looking superficially like a giant undergraduate textbook in human anatomy and physiology *Functional Morphology* embodies a storehouse of biological wisdom 'weighty' enough (at ~5 lb) to displace all other texts on the subject - at least in my library. Rohen (b. 1921) who has had an eminent career in German universities, is one of the founders of functional anatomy, and has published a number of books widely used in European medical schools, including a half dozen available in English. True to the Goethean Science tradition *Functional Morphology* is illustrated by 273 hand drawn diagrams beautifully drafted in colour pencil. This gives the book an organic feel that gave me a strong sense of the devotion of the author and artists to a true communion with the mysterious dynamics of human form and spirit. As Steiner said: 'One will only understand the human body if one sees it as an expression of the soul and spirit. If it is seen only as a physical body it will remain incomprehensible'. If this is the message infusing European medical schools and seeping into the consciousness of Waldorf biology classes, I will no longer feel quite so anxious about the domination of the materialist-reductionist paradigm.

From the outset Rohen lays down the principles of Goethean Biology. These include the threefoldness of the human organism. The lower organs (limbs and digestive system) operate in the purely physical realm, whereas the upper organs (nervous and sensory systems) deal with the informational realm. The middle system (circulation and respiration) is responsible for

the rhythmic circulation of both matter and information. These physiological systems express in willing, thinking and feeling respectively, which are aspects of the human 'soul' – a concept that so much of modern biology rejects out of hand. Constitutional types (type digestive, type cérébral, type respiratoire, respectively) also express the aspects of soul emphasis in each individual. Rohen stresses that 'our I-being, the essence of our individuality' is what separates us from animals. Humans alone are capable of independent action and life-long learning. Rohen offers that we can mobilise or raise into consciousness life and soul forces and understand them as surely as those of the physical world. He uses the difference between earthly categories of space and time and the spiritual category of eternity to demonstrate different soul realm experiences.

Most of this fascinating book, however, deals with detailed morphology and physiology and Rohen succeeds in demonstrating the amazing intricacy of organization in dynamic human development. For example bodily symmetry begins with establishing the bilateral, left-right, orientation, then the anterior posterior orientation develops as the notochord grows anteriorly, and finally the front-back (ventral-dorsal) orientation develops.

Rohen's section of evolution is also fascinating as he argues, contra conventional Darwinian wisdom, for a 'goal-directed process' known as 'orthogenesis', which, incidentally, formed a central part of Teilhard de Chardin's evolutionary ideas. In support of this thesis, Rohen points out that there are a number of ostensibly bad designs that have not been removed by natural selection. For example, the crossing of the alimentary and respiratory passages in amphibians and early reptiles eventually led to mammal and primate organisation which facilitated speech. Rohen characterises these trends as anti-adaptive and says that such forces have increased in importance with evolutionary time leading to greater emancipation: i.e., less control by the process of adaptation.

Possibly one of the most interesting and easy-to-understand aspects of dynamic human organisation comes under the heading of 'chronobiology'. We are all familiar with the influence of daily, monthly, yearly and even longer cosmic rhythms on the human body and the Earth, but there are also a myriad of much shorter rhythms ranging from neural activity to heartbeat, respiration, digestion and elimination cycles and of course sleeping and waking. Here again the upper (nervous) middle (rhythmic) and lower (digestive) systems are differentiated by rates of activity. So, all these rhythms play out simultaneously in an integrated symphony which demonstrates the extraordinary, multi-layered time structure that orchestrates bodily dynamics. Analogous time structure can be seen in the organisation of the biosphere, with the rapid heartbeat of the mouse influenced by a tiny but hyperactive nervous system, whereas the slow heartbeat of the plodding elephant keeps time with its voluminous but unhurried digestive system.

Rohen also lays out the relationships between different sensory systems and conscious experience. Again, from anterior (hearing, sight smell) to posterior (muscle, equilibrium and visceral sense) there is a gradient from acute, waking consciousness of the outside world to sub-conscious and unconscious sensory activity associated with the internal world.

Rohen ends with further discussion of orthogenesis and the 'physiological foundations of freedom' manifest in our upright posture and capacity for learning and language. The human brain still has many areas with no assigned functions. This indicates that we will continue to evolve to higher levels in future. Seeing the wholeness of the human organism as Rohen does, is surely one manifestation of an evolutionary step in this direction.

A Clear Line of Progress?

Max Payne

SCIENCE: A FOUR THOUSAND YEAR HISTORY

Patricia Fara

Oxford, 2009, 408 pp., £20 h/b
ISBN 978 1 019 922689 4

In Patricia Fara's words traditional histories of science depict it as an Olympic relay race in which the great geniuses of science hand on the flaming torch of abstract truth from one to the next in a pure quest for absolute knowledge. In this book she sets out to show that this is only one way of ordering the facts: there is another perspective, and she suggests it. For most of its history science as we conceive it today did not exist. Indeed the word in its modern usage dates only from the 19th century. Science and technology are intrinsically intertwined, yet there has always been a snobbish distinction between the pursuit of pure knowledge, which has been the privilege of a leisured elite, and the practice of mere craft skills. Yet many advances which we now regard as scientific were made by artisans who did not want to attain knowledge for its own sake so much as to perfect their own trade. What we now regard as science was once inextricably mixed up with activities now regarded as unscientific: magic, religion and philosophy. It had its beginnings in many different cultures, Babylonian, Chinese, Hindu, Greek and Islamic, and the people we might today define as scientists were pursuing knowledge in an integrated world view in which their understanding of physical processes meshed in with their metaphysical theories and religious beliefs. On their own terms all these different cultures and systems had their own validity.

As late as the 17th century Isaac Newton thought his alchemy and studies in the numerology of the Bible were as important as his mechanics, and the mechanics themselves were partly the consequence of a belief in a Deistic clockmaker God. In her subsequent history of Western science Patricia Fara delights in pointing out the complexities, confusions and blind alleys which were the reality on the ground: all of which have been retrospectively portrayed as the straight line of scientific progress.

At the turn of the 20th century some scientists were investigating

mysterious rays while others sceptically denied their existence. X rays were finally confirmed, but N rays were shown to be non-existent. Crookes, the discoverer of cathode rays - later discovered to be electrons - also declared that the evidence for spiritualism was just as good. Fara regards this as an obvious mistake. She also points out that apparently pure science often has a hidden agenda behind it. Darwinian evolution contained hidden assumptions about the cultural superiority of 19th century European civilisation. Pasteur's disproof of the spontaneous creation of life was inspired by his Roman Catholic belief that life has to be the creation of God. This history of science ends with the atomic bomb and the space race. Science has become entangled with politics and the military/industrial complex, and the disinterested and open pursuit of truth seems in our time to have become somewhat overlaid.

No history of science can ignore the perspective Patricia Fara depicts, yet she tends to skip lightly over the reasons for the triumph of Western European science over its rivals. In the 20th century alone scientific knowledge has advanced many, many magnitudes beyond immediate experience. The Milky Way has become just one galaxy amongst billions in a vast universe, the atom has been split into protons, neutrons and electrons, and protons and neutrons have been further subdivided into quarks. Molecular biology has revealed the inner workings of life, death and reproduction. These achievements can be traced back in linear succession back to Francis Bacon's injunction to seek knowledge through experiment and induction. The true legend of Galileo dropping weights from the leaning tower of Pisa symbolises the birth of the modern age. An entrenched belief system was refuted by an experiment, and science as we know it now, began then. Chinese science, Hindu and Islamic science never had such a moment, and so became blind alleys. It is legitimate retrospectively to validate all the ideas which led up to Galileo and onward to the present day. With the hindsight of history there is a straight line from Democritus to the quark. We strive to eliminate the personal equation from our experiments, and in the same way we eliminate the cultural equation from the history of science. The Babylonians are important because they were the first to observe the motion of the planets accurately and to predict their movements. The fact that they used their astronomy for astrology, and were more interested in irrigation works, and the worship of Ishtar is irrelevant. It is therefore correct to read the history of science in terms of those steps which led to its contemporary triumph.

Unless the mystics are right, and the material world is but a crystallisation at the lowest level of a spiritual reality that stretches far beyond it. In which case the holistic Hindu and Chinese ideologies were pointing in the right direction after all.

Max Payne *is a Vice-President of the Network.*

The People behind the Quantum

Chris Clarke

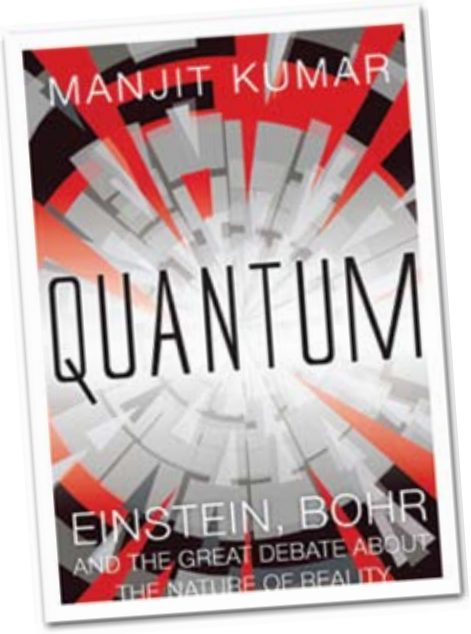
QUANTUM:
Einstein, Bohr and the great debate about the nature of reality
Manjit Kumar

Icon Books, 2008, 448 pp., £20, p/b - ISBN: 978 184831 029 2

[Note: single inverted commas are quotations of Kumar's words, while double inverted commas reproduce Kumar's quotations from other authors.]

This is *the* book about the early days of quantum theory. It is an engrossing read because as each character enters the scene they are introduced with a careful biographical sketch, so that we can identify with them and share their personal grappling with the ideas as they unfold.

The story proper starts when we join Max Planck on the 14th December 1900, 'just after 5.00 pm' as he begins his lecture containing the first mention of the word 'quantum', describing a packet of energy. We hear how, in his own words, this was "a purely formal assumption" to which he "really did not give much thought" - and neither did his audience. Later we meet Einstein, working in the Swiss Patent Office, the job which he said had brought to an end "the annoying business of starving", and learn how while there he read Planck's paper in 1905. Einstein later recalled how "it was as if the ground had been pulled out from under one, with no firm foundation to be seen anywhere", but he grasped the idea of the quantum not as a "formal



assumption" but as the clue to a new physical principle. So, one by one, the characters enter. We follow them as they range around Europe looking for universities with the vision to employ them, and as the ideas emerge with their bewildering contradictions, until on page 253 we reach the grand showdown at the 5th Solvay conference in Brussels in 1927, taking place particularly over coffee and croissants in the 'elegant art deco dining room' of the Hotel Metropole between the conference sessions.

Throughout this narrative Kumar describes the key ideas accurately and simply, and when he comes to the Solvay conference he goes into details, with helpful drawings, of the 'thought experiments' that played a large a role in the development of the ideas. Bohr's view was that it was essential to retain the key concepts on which physics was based, concepts like energy, position and momentum. The advantage of this was that it maintained continuity with past physics and allowed physicists to continue to use the common language that had been established over the preceding century. The cost of doing this was that these concepts could not be used to give an account of what was going on at the heart of the experiments in the new physics. Position and momentum worked fine as the experiment was being set up and as the results emerged, but in between there were strictly defined limits to their use, and one had to be guided by an entirely abstract mathematical formalism to connect what went in with what came out.

Part of this formalism, moreover, involved an essentially random element. This was a radical departure from the old physics where randomness was used only as a convenient way of summing up the behaviour of complex systems whose real dynamics was regarded as purely mechanical and in principle predictable.

All this was quite contrary to Einstein's basic instincts. His work on relativity 20 years earlier had been based on dropping the old concepts of separate space and time and moving to a united picture of space-time. The limitations on the concepts of position and momentum in quantum theory meant for him that, once again, there was a need for new concepts. The introduction of randomness in quantum theory was just further proof that there was something fundamentally wrong with the theory, though as Einstein said later the problem "is not so much the question of causality but the question of realism." But Einstein had not produced an actual alternative, and so he did not give a presentation at the conference, but limited himself to probing quantum theory with questions that sought to prove that it was inconsistent in its current form. He maintained this position, and his quest for an alternative, for the rest of his life, resulting in persistent stories that he had become senile and could no longer understand quantum theory.

The final section of Kumar's book brings the discussion up to date with a brief sketch of more modern developments, particularly those concerning non-locality, in so far as they concern the Bohr-Einstein debate. David Bohm makes his appearance here, introduced with a fascinating account of his relations with Oppenheimer and his struggles with McCarthyism. Bohm was the first to demonstrate a viable alternative to Bohr's approach, arguing that "the mere possibility of such an interpretation proves that it is not necessary for us to give up a precise, rational, and objective description of individual systems at a quantum level of accuracy." And the link with Einstein was underlined by Bohm's thanks, in his first paper on an alternative theory, to Einstein "for several interesting and stimulating discussions." Kumar's focus then shifts to John Bell who, on reading Bohm's papers, said that he "saw the impossible done", and was set on his own course to explore just how far one could get with realising Einstein's vision of an alternative.

Inevitably this latter part of the book omits a great deal, including much that would be of interest to SMN readers. There is nothing on the possible role of consciousness (a topic that developed on the fringes of mainstream quantum theory in later years), nor on Bohm's wider vision of reality, within which his alternative theory to Bohr is only an illustrative example. But the book is unequalled as an exposition of the personalities and ideas on which quantum theory is founded.

Chris Clarke *was Professor of Applied Mathematics at the University of Southampton.*

The Nature of Transmutation

Peter Stewart

MODERN ALCHEMY

Mark S. Morrisson

Oxford, 2007, 262 pp., £18.99 h/b - ISBN 9 780 195306 965

The book *Modern Alchemy* by Professor Mark S. Morrisson is subtitled 'Occultism and the Emergence of Atomic Theory'. Initially, as a physicist, I had a strong objection to the title because, the classical definition, for me, on the physical level, is that alchemy is the transmutation of a base element such as lead, into the noble element, gold. On the spiritual level I understand it as the transmutation of the leaden dross of the personality through self realisation into the gold of the higher self. I believe that in fact only a few highly enlightened scientists have ever achieved this goal. The prevailing scientific view was, and still is, that alchemy was an aberration and that Newton's interest and experiments in this field were due to his partial mental breakdown.

The author states that *Modern Alchemy* offers the first sustained exploration of the relationships between a thriving occult alchemical revival and what, by the 1920s, had widely come to be known (in the popular press) as the 'modern alchemy' of atomic science. Morrisson begins the story in 1901 when the chemist, Frederick Soddy and the physicist, Ernest Rutherford working in their laboratory at McGill University discovered that radio-active thorium was decaying and transforming into helium. Soddy blurted out 'Rutherford this is transmutation', to which Rutherford quickly replied 'for Mike's sake, Soddy, don't call it transmutation. They'll have our heads off as alchemists'. Later, Rutherford's view was obviously to change.

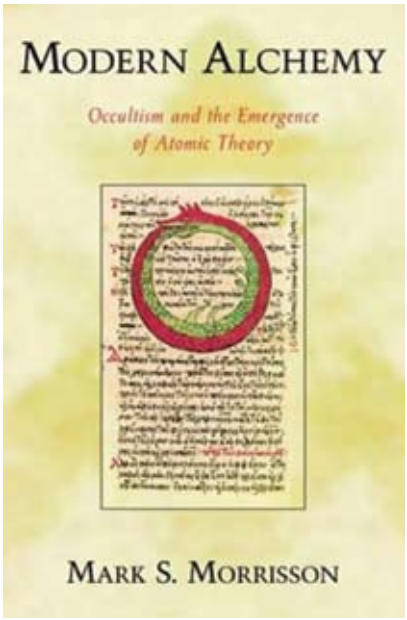
Morrisson then describes how in 1917, Rutherford completed his 'alchemical' great work when he actually transmuted nitrogen into an isotope of oxygen by bombarding it with highly powerful alpha particles. The crucial difference between the two processes is that radio-active decay is a naturally occurring process of disintegration and that Soddy and Rutherford only passively observed the transformation. In 1917 on the other hand Rutherford actively caused the transformation, a process of fusion by the addition of energy. However he did not actually transmute a base element into a noble element. This was left to scientists at the Lawrence Berkeley Laboratory who, in 1980, transmuted bismuth into gold.

However it is obvious that by 1937 in his book *The Newer Alchemy*, Rutherford had decided that his work was in fact alchemical. This is confirmed when ennobled and required to produce an armorial coat of arms he chose as his two 'supporters', on the one side a Maori warrior denoting his New Zealand origins and on the other side the figure of Hermes Trismegistus the great and original alchemist denoting the influence on his scientific work. The eminent American physicist Glenn Seaborg also authored a book titled *Modern Alchemy* in 1994 - a Collection of his Papers.

Morrisson points out that scientists working on atomic physics and radiochemistry in the 30s and 40s often used alchemical tropes as 'flavour of the month' to attract funding and financial support and to give their work an interesting aspect when presenting it in the popular, public, domain.

In classical alchemy the base metal is first reduced to a *prima material* without the specific characteristics of any element. Then a specific 'noble essence' is introduced to make gold. It would appear that physicists began to recognize the sea of nuclear particles as the prima materia from which all elements were constructed.

The second strand in the same period, Morrisson tells us, is the intertwining relationship between nuclear physics and what we now recognize as extensions of consciousness



providing direct cognition. The name given to the technique was 'occult chemistry'. At the time the word 'occult' meant hidden. Today the word occult' unfortunately has a pejorative meaning tying it to ideas of black magic in the scientific and popular minds. This initiative began in 1895 when Charles Leadbeater of the Theosophical Society underwent training in Kundalini Yoga. This has the effect of raising the kundalini or serpent energy through the centres of consciousness or *chakras* to finally vivify first the pituitary centre and then the pineal centre in the compound ajna centre between the eyebrows. A tiny flexible tube, a protruding, non-physical organ of consciousness with a sensory and perceptive capability, is then created and extended from the ajna centre. It resembles a miniature snake and has a sensor at its tip similar to an eye - the so-called 'third eye'. This object is referred to in Egypt as the *urkek* and is depicted on the funerary mask of Tut ankh Amun and confirms his capability for this type of perception.

The pituitary and pineal centres can also be activated using the much safer Chinese technique of the 'microcosmic orbit'. The urkek or *uraeus* can be extended or contracted, the effect being to change its power of magnification to match the size of the object being examined. Later Leadbeater and Annie Besant worked together between 1895 and their deaths in 1933/34 to examine the atomic structure of the range of elements. The specimens were mainly provided by Sir William Crookes.

Stephen Phillips tells me that Leadbeater studied the shapes of MPAs and how the different types of bodies were arranged in the funnels, bars, spikes etc. He counted the numbers and noted the types. Besant, as her contribution, would then examine the types of bodies inside the micro-psi atoms selecting each one and using a form of will power, or *kryashakti*, to make the body break up into less complex particles. She counted the numbers of UPA's inside the various bodies and recorded their type.

In some elements they noticed subtle differences between similar structures and in 1908 they gave a version of neon the name meta neon'. Today we call it neon 22. They had in fact discovered isotopes six years before Soddy coined the term 'isotope', 5 years before Francis Aston discovered meta neon in 1913, crediting Leadbeater with the name and its atomic weight of 22.33 and referring to their 1908 paper. It was to be 12 years before Aston, himself, separated neon 22 with his mass spectrograph. Soddy and Aston were both awarded the Nobel Prizes in Chemistry in 1921 and 1922 respectively for their work whereas Leadbeater and Besant because their instrumentation was non physical and because the interaction of information and consciousness had yet to be realised, were totally ignored.(See Jeff Hughes, *Physics World*, Sept 2003, Pp31-35)

Dr Stephen Phillips, a theoretical nuclear physicist has reviewed the work of Besant and Leadbeater on the atomic structure of the elements and finds a remarkable similarity with results from elementary particle physics. Later Geoffrey Hodson, another Theosophist used the same technique and with increased magnification imaged electrons. Finally Ron Cowen a Canadian theravaden buddhist monk working with Dr. Stephen Phillips imaged down to quark and string size.

The geneticist Dr Barbara McClintock also used a similar technique to extend her consciousness, to view and merge with a chromosome of neurospora or maize to 'become one with it' and its information field to which she then had access. From the information she was able to obtain she wrote a series of papers for which she was later awarded the Nobel Prize in genetics. I was, myself, taught a version of the technique by former SMN member Dr Giuliana Conforto, an Italian nuclear physicist and follower of Giordano Bruno at the Brahma Kumaris, 3rd International Symposium on 'Science and Consciousness' at Athens in 1991.

Dr. M. Srinivasan, formerly Associate Director of the Physics Group of India's Bhabha Atomic Research Centre suggests that these techniques should be scientifically investigated and developed to be used by physicists for particle research. Perhaps we don't really need the Large Hadron Collider (LHC) at CERN and would be able to see particles in their pristine state rather than mangled by high energy collisions?

The breadth of Morrisson's book can be gauged by the chapter headings;

1. From the Golden Dawn to the Alchemical Society
2. Occult Chemistry, Instrumentation and the Theosophical Science of Direct Perception
3. Chemistry in the Borderland
4. Atomic Alchemy and the Gold Standard

So there is more material to discuss than space allows for in this already overlong Review. I do indeed recommend Morrisson's book as a good and most interesting read. It is full of information not readily available elsewhere. Interestingly, it also comes on the Centenary of the first publication of 'Occult Chemistry' in 1908.

Professor Dr. Peter Stewart
FRA Eng, DSc, MSc, F.Inst.P is Director of The Informal Centre for the Study of Extended Human Consciousness and Controlled Intuition.

philosophy-religion

Another Ruse
Martin Lockley

EVOLUTION AND RELIGION: A DIALOGUE
Michael Ruse

Rowman and Littlefield Publishers. Inc., 2008, 142 pp., US$16.95, p/b - ISBN 978 0 7425 5907 3.

The prolific Michael Ruse has produced another book on the often-fractious but perennially-topical dialogue between science and religion. In a departure from his usual format of straightforward historical and philosophical discourse (*Network* 91 and 92), Ruse adopts the ruse of a fictitious five part round

table discussion (in a Public Television series 'Eternal Questions') with the provocative title 'Science and religion: who is winning?' Five fictitious panelists include Professor David Davies, an Evolutionary Biologist, the Reverend Emily Matthews, an Episcopalian priest, Harold Wallace, head of a large Southern Baptist church and Martin Rudge an academic historian/philosopher, who the moderator, Redvers Fentimann, treats as the ultimate arbiter on questions of fact. The entire cast is lavishly named in honour of Ruse's own family, and it is clear that Davies represents Richard Dawkins, that Rudge is Ruse, while Matthews and Wallace represent two very different shades of Christianity on the non-secular side of the aisle.

In Programme 1 - on 'Options' we learn that Ian Barbour defined four science-religion debate positions: Warfare, Independence (also labeled Neo-orthodoxy by Karl Barth), Dialogue and Integration - the latter being the position of Process Philosophers like Alfred North Whitehead. Davies (Dawkins) openly adopts the warfare stance. Wallace, the Baptist, although opposed to scientism, claims to be for dialogue, and Matthews professes to be for integration. Rudge (Ruse) claims independence and cleverly makes the three other protagonists intelligent, moderately well-informed, and mostly polite despite being wedded to their own favoured if not entrenched positions. Through Davies we get a glimpses of Karl Popper and science's self-correcting ability, Wallace raises questions about Marxist influence on Darwin, Gould, scientism and methodological naturalism, and Matthews reminds us of the historical paradigm shifts in world view that made us reject the medieval view of the world as an organism in favour of a mechanical, Newtonian, Cartesian universe, before the re-emergence of Gaia and a new feminine world as organism philosophy. As if to underscore the need for a minimum of cooperation Ruse closes Programme 1 by dismissing Dawkins' *The God Delusion* as 'one of the worst books I have ever read'.

Programme 2 on 'Origins' gives Ruse a chance to discuss Darwin's influences (Paley's Natural Theology) and William Whewell (pronounced 'Hule') who, incidentally coined the term 'consilience' (consilience of inductions) which E. O. Wilson adopted for his book title (see below). Here the argument revolves around the meaning of intelligent design (is the world so well-designed that we must infer God?) and the perennial question 'where did we come from?' Ironically the idea of History and Evolution has clear Judeo-Christian origins and both science and religion are largely human social constructions. However, we should not use God as a 'science stopper' by claiming no solution to such apparent problems as irreducible complexity.

Programme 3 on 'Problems' cites the work of those such as SMN member Brian Goodwin on intrinsic patterns (morphogenetic fields) and self-organisation as a significant challenge, and 'kinder, more gentle' alternative, to harsh adaptationist (Darwinian) doctrine. Wallace cites his namesake Alfred Russel Wallace (co-author of Darwinian evolutionary theory) on the Anthropic sentiment that the universe may have been designed to produce complex 'life culminating in man'. And even the atheist Davies admits that Dawkins' conceded that 'Nature is cleverer than we think'.

Programme 4 on 'Histories' gets into complex problems like the origin of life, Lynn Margulis' theories on symbiogenesis, the origin of Eukaryotes and the Cambrian explosion. Such different groups as creationists and integrationists of a holistic bent are inclined to be skeptical of current Darwinian explanations for these 'emergent' events, and therefore entertain alternative dynamics such phase shifts in complex systems and punctuated eruptions of Order from Chaos (*Network* 88). Ruse cautions, however, that interpreting new scientific ideas as proof of the Bible or intelligent, divine intervention is dangerous, if only for the simple reason that we don't know. But such warnings do not remove the conundrum that there is a fine line between Bergson's vital force and the inner light spoken of by religious persons such as Teilhard de Chardin who took his science and his religion seriously (and as a result was censored both by the Church and by grumpy scientists like Sir Peter Medawar). Ultimately the big bang, the mysterious origin of life and emergence of human self consciousness are inadequately explained by science, and any available hypothesis could equally well be attributed to natural law or divine creation. Both see design, even intelligent, cosmic organisation, but only the second postulates a designer or creator.

Programme 5 on 'Humans' begins with E. O. Wilson's adaptation of Darwinism to create the paradigm of Sociobiology, the concept of reciprocal altruism, and later spin-offs including his Pulitzer Prize winning book *On Human Nature*, and the sub-disciplines of Evolutionary Psychology and even Evolutionary Psychiatry. Prize or no, Sociobiology was roundly criticised by Wilson's own Harvard colleagues (Gould and Lewontin) who found the deterministic 'biology is destiny' explanation of Human Nature inadequate, essentially preferring to place emphasis on nurture and culture rather than nature. Genetic determinism may work for ants (on which Wilson is an expert) but humans have what are described as 'dimensions of freedom'. As is often the case, consciousness is left to the final pages. Davies dismisses it as a product of natural selection - the software that runs the brain's hardware. Matthews sees mind and brain as co-evolving and considers it a miracle that 'dead matter can somehow give rise to thinking' (a position known since the time of Thomas Carlyle as 'natural supernaturalism'). Through the voice of Rudge, Ruse ends on the rather weak, mechanistic but honest position that 'the human thinking apparatus is just not strong enough to solve the problem of consciousness'. He ends with his 'independence' position that there are 'things that a science based on a mechanical model or metaphor simply rules out of discussion'. These 'things' include ultimate origins, morality, consciousness and meaning. No mention is made of a science that moves us beyond the mechanical model, and for this reason the SMN reader may be disappointed.

There are many dimensions of meaning and interconnectedness that Ruse avoids or touches on only briefly through the voice of his integrationist mouthpiece (Matthews). I found myself wondering why so many of Ruse's books explore the perennial questions of the relationship between science and religion. Is this really just an academic subject, or a deep psychological need for wholeness? In fairness, the book was never meant to explore Ruse's deepest convictions. His interest is historical and philosophical and he remains a leading and level-headed commentator on the unfolding of the science-religion debate in western society. The book format is deliberately light-hearted and

informative, but the more thoughtful reader may wish to adopt the ruse of reading between the lines in order to meditate on the deeper psychological currents that drive so many dualistic and dichotomous debates.

Professor Martin Lockley *teaches palaeontology and consciousness studies at the University of Denver.*

Nature and Meaning

David Lorimer

THE UNDERLYING ORDER AND OTHER ESSAYS

Kathleen Raine

Temenos Academy, 2009, 153 pp., £20, h/b – ISBN 978 0 9551934 6 0

Kathleen Raine will be well-known to many readers as the founder of the Temenos Academy, the foremost Blake scholar of her time and a great poet. Interestingly, when she was choosing what to read at Cambridge, she chose science, because for her poetry and literature were not so much subjects to be studied as the stuff of life. This series of six essays is divided into two parts, the first of which deals with nature, imagination, meaning and beauty, while the second consists of three essays on John Donne, Shelley and Wordsworth. They all challenge Western materialism, and in particular its implications for our relationship with nature. She writes: 'by making of the world an impersonal mechanism, devoid of life, we destroy all possibility of living relationship with nature, of discovering in its ever-changing panorama of appearances the meaning of value or beauty, or anything of what used to be called Holy'. Consequently, nothing is sacred, nothing has meaning, nothing has value: only utility. Nature is no longer a language that speaks to us, and is only interpreted in quantitative terms. The universe is both dead and mindless, and any art based on this premise can only be loveless.

The Enlightenment represented a divorce between inner and outer worlds, leaving God as a mechanistic clockmaker and entailing the loss of vision by sundering the unus mundus intrinsically linking soul and nature. For Kathleen Raine, and indeed for Blake and Yeats, this means seeing more deeply through and into nature, whereby phenomena are perceived mystically as forms of living light. 'One thing alone makes a poet, Imagination, The Divine Vision', wrote Blake, adding that Nature is Imagination itself. For poets, the universe is a living being, and they call for the reinstatement of wisdom, a reversal of the premises of our culture, a deepening of knowledge so that materialistic science is no longer regarded as all-inclusive. Raine goes as far as to insist that since knowledge is an experience, whatever can be stored in a computer cannot be knowledge, only information. The experience of beauty gives us the insight that there is a harmony between the perceiving mind and nature as we look with the eyes of love. She illustrates this with passages from Wordsworth, Traherne, Coleridge and art of Vermeer, Chagall and Stanley Spencer. For instance, Traherne writes: 'The World is a mirror of infinite Beauty, yet no Man sees it. It is a Temple of Majesty yet no man Regards it'. All these poets and artists insist that they are seeing more rather than less.

The essay on John Donne describes his career as well as his work as a poet, concentrating especially on the tension between the temporal and the eternal. This is also reflected in tensions between science and religion, action and learning, worldly reputation and martyrdom, and especially life and death:

> All other things, to their
> destruction draw,
> Only our love hath no decay;

Donne struggled with his own mortality, as we all do. He preached his last sermon in February 1630 entitled 'Death's Duell, or A Consolation to the Soul against the Dying Life, and Living Death of the Body'. It contains some wonderful passages, which he also expressed in his last poems. Shelley is portrayed as a deeply versed Platonist rather than an atheist, especially in relation to his immortal lines

> *T*he One remains, the many
> change and pass;
> Heaven's light for other shines,
> Earth's sha*dows fly;*

For Raine, 'Shelley is the supreme poet, uniting in his symbolic virtuosity images of the visible world with resonances of meaning and beauty of the immeasurable worlds of Imagination'. It is hard to disagree. The final essay on Wordsworth contains some beautiful autobiographical narrative, as she too knew this countryside like Wordsworth as her young heart 'assented to his vision of nature in its dignity and grandeur'. In her youth, her house had neither water closet, nor taps, nor electric light. Instead, they had a well of spring water and a water barrel to collect the rain. Wordsworth, too, was a reader of Thomas Taylor, absorbing his Platonism. His insight into nature, according to Raine, was cosmological rather than theological – Western Christianity has always been 'deeply suspicious of pantheism, preferring to keep Creator and creation apart'. There is an interesting commentary by Blake on a passage in Wordsworth's Excursion where he refers to the individual mind and its fit with the external world. For Blake, of course, this was a false distinction, but it is a significant observation. Nevertheless, he does unite the great cosmic mystery with the microcosm of human life and shares Blake's vision of a living universe. In these writers, as well as in Kathleen Raine herself, wisdom and poetry come together, and may form the basis of a worldview informed not by mechanism but by life itself.

A Tangled Hierarchy

John Kapp

GOD IS NOT DEAD

Amit Goswami

Hampton Roads Publishing, 2008, 309 pp., $28.95 h/b
ISBN 978 1 57174 563 7

With *The God Delusion* and his adverts on buses 'There is probably no God' Richard Dawkins has been goading scientists to prove him wrong. He has now succeeded. In *God Is Not Dead* Amit Goswami takes up Dawkins' challenge, and provides the answer that the world needs. 'Science Proves God' should be tomorrow's headlines, but not the straw God of popular Christianity, nor creationism. This

book therefore deserves to sell many more copies than Dawkins' book, but it should not just be read, but acted upon to transform and save ourselves, science, the world from our present self destructive course.

The book's purpose is to get science out of the straitjacket of meaningless materialism, which has only one level of reality – material – and only one source of causation – upwards. It has given us wonderful technology but also the nightmares of terrorism, energy crisis, global warming and nuclear weapons. The shackles of materialist science and scientism are now jeopardising democracy, capitalism and liberal education, setting limits to freedom that are no better than the church and feudal domination of the past. Materialist thinking has created a wound in the collective psyche of humanity, yet instead applying itself to healing, science is still calculating the modern equivalent of how many angels can dance on the point of a pin.

Amit seeks to heal this wound. His book is a rallying call for quantum activism to shift the paradigm from materialism to monistic idealism (holism without the weakness of dualism) and from postmodernism philosophy transformed to transmodernism. (motto 'I choose, therefore I am'.) This releases the God potency of the creative mind within us, and a new age of ethical living can emerge.

Amit wants to bring back the modernist spirit of mental exploration without its dark side, its attitudes of human-over-nature, and reason-over-feeling, and without its dependence on simple hierarchies and the ego isolation of the lone individual. The new era of transmodernism and the new science begins with a quantum leap in our attitudes – to human within nature, to reason integrated with feeling, to tangled hierarchies, to the integration of the ego and quantum consciousness/God.

Amit has given us a banner under which we can unite to storm science's Bastille (which has stood impregnable for four centuries) and reclaim it from usurping scientism. Previous assailants have failed because they have sought to substitute dualism. This is fatally flawed as there is no mechanism by which separate spirit and matter can interact. Amit avoids this flaw by adopting a monistic belief (as materialism does) but confirming the mystic belief that the ground of all being is not matter but consciousness.

We are so steeped in the linear, continuous, upward causation of materialist thinking that Amit's new paradigm is difficult to understand. Life, mind, ethics, creativity, transcendence, interconnectedness, healing, and even matter are all emergent properties of quantum consciousness (alias God) by downward causation. The mechanism for this can only be understood with the use of concepts of quantum physics, such as quantum leaps, entanglement, (coupled) non-linear, discontinuous, nonlocality (outside space time), tangled hierarchies, (top down and bottom up at the same time)

In quantum theory there are no manifest material objects independent of subjects – the observers. Light and all quantum objects are both waves and particles. As waves they are transcendent potential information – possibilities. As particles they are immanent events of actuality in a body or on a screen. Objects remain as waves until they are brought into manifestation by observation. Consciousness does this by collapsing waves into particles of objects that are seen, (such as letters on this page) and splitting itself into a subject that sees (such as you reading them).

Quantum thinking allows us to treat mind and matter, (which are respectively internal and external experience) on an equal footing. We are all connected because we are all manifestations of the same consciousness. The connection is signal-less nonlocality, transcending space and time. The role of matter is to make manifestation possible as representation of the subtle. Every cell in our body knows where it is and what it has to do because its blueprint is in the morphogenetic fields of our aura. The in-form-ation creates form when quantum consciousness (alias God) collapses it into actuality. 'Let there be life and there was life' But this is not the literal Bible creationists' ideas. Amit says yes to intelligent design, yes to evolutionism, but no to creationism. Life is here and we are here because of the universe. But the universe is also here because of us, the observers, in a tangled hierarchy.

This book gives scientific explanations for phenomena such as altruistic behaviour, subtle bodies, soul, ESP, fossil gaps, telepathy, clairvoyance, reincarnation. The controversy created by multicultural pluralistic thinking can now give way to a new integrated science incorporating spirituality, and a great leap forward for humanity.

John Kapp *is a scientist and writer, as was his father, Prof Reginald Kapp (1885-1966) who wrote 3 books about life and cosmology – see www.reginaldkapp.org*

Compassion and Vulnerability

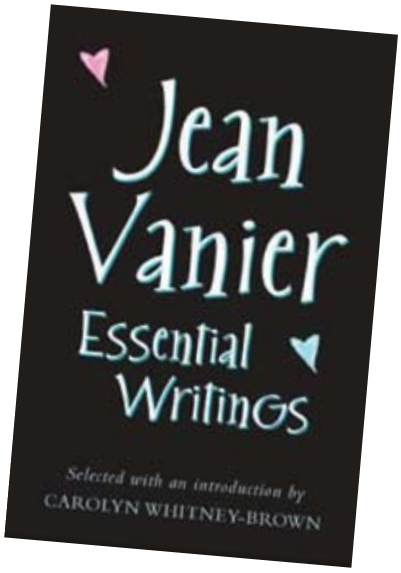
David Lorimer

ESSENTIAL WRITINGS

Jean Vanier

Darton, Longman and Todd, 2008, 176pp., £9.99, p/b
ISBN 978 0 232 52753 7

Jean Vanier, Founder of L'Arche and Faith and Light, was born in 1928. His father was Canadian ambassador to Paris, and Vanier began his career at a young age in the Navy. His father asked him what it was he really wanted and why he wanted to join the Navy. His father's answer was: 'I trust you and, if that is what you want, well then that is what you must do'. His father's trust meant that he could trust himself, and led Vanier later to say that we must listen to children, and that they will never be able to trust themselves unless someone trusts them. He came out of the Navy at the age of 21 in 1950, and set out on his spiritual quest with the help of a Dominican priest called Pere Thomas, gaining his doctorate in 1962 on happiness as principle and end of Aristotelian ethics.



His life work began in earnest in 1964 when he moved into a dilapidated house in France with two companions, thus founding that first L'Arche community. Over time, this initiative grew into an international network of communities where people with developmental disabilities and those who assist them live together. During his studies, he existed in a world where weakness, ignorance and incompetence were things to be shunned. Here, in his new life, he comes across human vulnerability not only in his companions, but also recognises that it is deeply embedded in himself. He discovers how much pain was hidden in the hearts of his companions, and 'how they had been broken by rejection, abandonment and lack of respect'. The answer is healing, but this healing is not an escape from suffering; rather, 'to be healed one must want to live and to give life'. And many who heal are themselves wounded.

The contents of this book are drawn from a wide variety of writings, including pastoral letters and speeches. They are shaped around what Vanier calls the three movements of transformation: change the world, with love, one heart at a time. Early in his experience, Vanier confronts the immense forces of darkness and hatred within himself, what Jung calls the shadow. This self-discovery was deeply disturbing, but Vanier does not subsequently retreat into frenetic activity 'where I could forget all the garbage and prove to others how good I was'. This helps him realise that 'healing takes place at the bottom of the ladder, not at the top'. Later, he observes that we have to welcome our own weakness, poverty and deepest needs and realise that 'we all have vulnerable hearts and need to be loved and appreciated' – a point which is only too easy to forget.

An example of reaction to vulnerability is given in a poem about Peter's denial of Jesus, when Peter insists that he does not know this man. For Vanier, the man he does not know is the 'weak, battered person'; he recognises rather the man who had spoken with authority, who had performed miracles and called Peter to follow him.

This is the paradox of the cross. Vanier writes brilliantly about old age and death: that the end of life is similar to the beginning, with the need to be held and open up to our being. This part of life has to do with loss 'as we gradually lose our hair, our teeth, our memory, our job, our health, our energy, our friends, and eventually our life'. It is a return to the awareness of our weakness, an opportunity to accept our vulnerability, which is the very basis of a true experience of communion with another. We lose our capacity to do things, but we remain able to be, even if we become increasingly dependent. This, concludes Vanier, 'is the mystery of life, from the littleness and vulnerability of the child to the littleness and vulnerability of old age with that period in the middle where we think we are important and we think we are strong'. Then he adds that the fundamental question behind this process is: 'who are we really throughout all that?' Some old people, he observes, grow more gentle and kind; 'they live communion and become more human'.

Writing on New Year's Day 2008, Vanier reflects on the many crises facing humanity, which he regards as an opportunity to find new and peaceful solutions. His vision is that these solutions 'will imply less speed and mobility and more interiority: less consumption and more relationships; less technology and more community; less individualism and more sharing and living together'. These are prophetic words, as is the poem with which I will end this review in the hope that you will be inspired to buy this book.

> Hope for our world lies not in the manufacture of greater weapons or the implementation and more repressive laws; hope lies in our capacity to love and to forgive and in our desire to live reconciliation and to grow in love for our enemies.

Partly Whole

Malcolm Hollick

THE TAO OF HOLISM:

A blueprint for 21st century living

Howard Jones (SMN)

O Books, 2008, 345 pp., £14.99 p/b
ISBN 978-1-84694-080-4]

Holism is a big idea, hard to pin down precisely. It means different things to different people and in different contexts. But the unifying thread is a sense of wholeness rather than fragmentation into parts; of inclusion of every aspect of a subject or issue. The Tao likewise has many meanings and interpretations, but is perhaps best rendered here as The Way – above all, the way of harmony with the spirit that dwells in all things, and consequently the way of harmony with all people and all beings. By contrast, 'blueprint' refers to an old method of reproducing technical drawings, and so implies a precise specification for making something.

So what Howard Jones is offering is a total design for living harmoniously with everything and in all ways – a highly ambitious project after my own heart! Those of us who approach this topic inevitably must fail at some level. We come to it as individual humans with our own limited beliefs, knowledge, personalities and experience born out of our lives in certain places and cultures, at a particular time in history. We do our best to encompass the whole, but cannot avoid reflecting the boundaries of our knowledge and understanding. We do our best to point out The Way, when we are mostly far from enlightened ourselves. And we do our best to write a recipe for living that is not too prescriptive, and which embraces the diversity in all things that is itself an essential part of holism.

How well does *The Tao of Holism* meet these challenges? Howard Jones brings a lifetime of study and an extraordinary breadth of scholarship to his task. He deals with most of the key issues facing humanity, and erects clear signposts to the holistic Way. I agree with many of Jones' arguments, although my own perspective is naturally different in some ways.

My biggest disappointment was the lack of integration of the disparate chapters into a coherent whole. To me it seemed more like a list of components for building a holistic way of living than a blueprint for putting them all together.

Malcolm Hollick *PhD is author of* ***The Science of Oneness****: A worldview for the twenty-first century.*

psychology-consciousness studies

Myers for the 21st Century

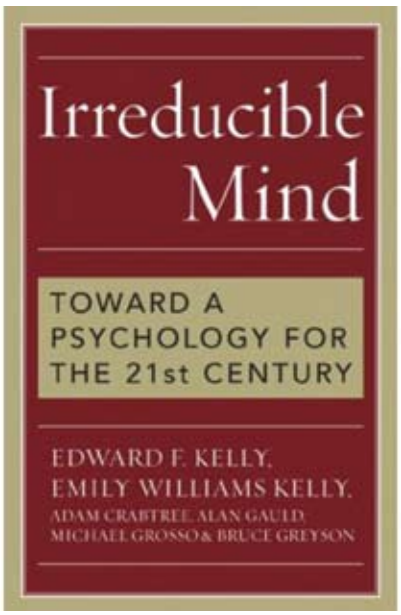
Jonathan Edelmann

IRREDUCIBLE MIND:
Towards a Psychology for the 21st Century
Edward Kelly, Emily Williams Kelly, Adam Crabtree, Alan Gauld, Michael Grosso & Bruce Greyson

Lanhan, Maryland: Roman & Littlefield Publishers, Inc., 2007, 800 pp., $63.96 h/b - ISBN 0742547922. With CD containing F. W. H. Myers' hard-to-find classic two-volume Human Personality (1903) and selected contemporary reviews

Irreducible Mind (IM) is one of the most well researched, copiously annotated and carefully argued attacks on physicalism and epiphenomenalism to date. It is a sophisticated attempt to incorporate parapsychology (or other data often ignored by mainstream science) within a scientific theory of mind, and a must-read for anyone working in consciousness studies, psychology and the history of science.

Although a massive collaborative effort by six distinguished authors who work in psychiatry, psychology and philosophy, one could easily mistake it for the work of a single author given its coherence of style and thought, which is rare with edited volumes. The authors share a common dissatisfaction with physicalism, the received academic conception of mind, arguing that a viable alternative does exist and basing their views on those of F. W. H. Myers. They cite research from many areas of psychology. There's a diversity of empirical evidence suggesting that consciousness profoundly influences the physical world, that it may survive death and that aspects of many physical phenomena are manifestations of an underlying mental reality. They argue that 'physicalist theories of mind-brain relations are inadequate in principle' (p. 639) so we need a conception of mind-body able to accommodate all that we know about them.



Chapter 1 (Edward Kelly) is an overview of the past few centuries of philosophy of mind, paranormal research and psychology. Kelly brings philosophical subtlety and wide-ranging historical knowledge, making the chapter an important resource for advanced undergraduate and graduate teaching in psychology, philosophy and history of science. But Kelly is not merely reporting history—he engages it, thereby making an interesting story all the more provocative, arguing that reductionism has failed to provide an adequate explanation of consciousness and that non-reductionistic alternatives have been overlooked. A problem with this chapter, however, is that sometimes Kelly argues that computational theories of mind have not told us anything meaningful about consciousness (p. 45), yet he also says that a robust theory of consciousness must take into consideration everything we can learn about it. Surely he cannot be arguing that neuroscience has contributed nothing to our understanding of the 'hard problem' because it has operated (primarily) within a materialist paradigm?

Chapter 2 (Emily Kelly) provides an important overview of Myers' thought, which is unfortunately overshadowed by that of William James—a friend and admirer of his—despite Myers's importance in the history of Western thought. It describes the problems associated with a major assumption of contemporary psychology; that the psyche can adequately be approached via the methods of physics. It sets out the philosophical foundations, detailed by Myers' himself, on which the scientific evidence in the rest of the book is built (discussed briefly below).

Chapters 3 – 8 each refer to hundreds of studies aimed at showing that mental states do influence the world in a variety of ways and that minds do survive death (and live to tell about it). Apparently supranormal experiences are also described, raising questions about the capabilities of mind. The anecdotes and other evidence is critically discussed, thus avoiding both 'New Age' naivety and the knee-jerk rejection common in academia. Chapter 3 (Emily Kelly) tells, for example, of psychosomatic conditions in which a mother believes she is pregnant (but is not) and develops the symptoms of pregnancy. There is a study of a Yogin who was able to stop his heart from beating at will for almost five days before returning to a normal condition (p. 177). These indicate profound levels of mental causation. Chapter 4 (Alan Gauld) argues that memory and personal identity need not be rooted in the brain because of, for instance, near-death experiences and Ian Stevenson's studies on reincarnation. Gauld also discusses problems with contemporary psychological and neurological conceptions of memory. Chapter 5 (Adam Crabtree) examines reports in which a person automatically sends a message containing objective information unobtainable through normal means via a supposed personality from another realm (p. 307). Myers seemed to think this second personality was not necessarily an independent personality (p. 354), but an otherwise hidden aspect of the mind.

We hear of Leonora Piper of Boston who for 40 years was able to channel personalities, thus providing supranormal knowledge and embody mannerisms of people unknown to her; Crabtree suggests these reports (and others) were never falsified. Chapter 6 (Emily Kelly, Bruce Greyson and Ed Kelly) examines near-death and out-of-body experiences as well as sensations gained from the dead. Physicalism clearly cannot accommodate these accounts, yet it is argued they deserve our attention. They provide a lucid critique of physicalist explanations. Chapter 7 (Ed Kelly and Michael Grosso) treat genius, or 'the spontaneous production of original, unexpected and unteachable work that wins our admiration' (p. 427). Here they are not taking on physicalism or epiphenomalism themselves, rather the 'nothing-special' interpretation of genius,

which considers it the result of mere special effort. Chapter 8 (Ed Kelly and Grosso) treats mystical experience, the 'near-relative' of genius. This is not a theological or comparative project, but a serious appraisal of 'the psychological character and biological accompaniments of these powerful experience,' which also tries to find a middle ground between the naïve acceptance of some religious believers and the unthinking reductionism of some academics (p. 496). The canonical mystical experiences are discussed along with the various sorts of interpretations of them. They recognize the biological role and impact of mystical experiences, yet critique reductionistic accounts. They recognize the need of traveling to the Orient to further study mystics (p. 572).

Chapter 9 (Edward Kelly) is the grandest in scope; it attempt to reconcile the wide range of data on mystical experiences, genius, apparitions, mediums, etc. in previous chapters with the Myers/James 'filter' theory of consciousness, as well as with the latest findings in many branches of physics and psychology. The Myers/James filter theory says that the human being is made of two aspects; a psyche that interacts with the body/brain. The brain does not produce consciousness/mind, but it is an organ that influences, shapes, constrains, enhances and otherwise 'colours' consciousness in various sorts of ways (p. xxx, p. 73, pp. 603-43). This view, argues Kelly, explains 'rogue' information and can accommodate quantum mechanics. Although dualistic, the authors of IM reject Cartesian dualism because the concept of matter is so problematic: 'Matter as we customarily experience it does not exist, at least not in the way we naïvely believe it to exist' (p. 631). So while there is some sense in which consciousness and body are different, the difference must not be understood in conventional philosophical terms or in terms of ordinary experience. Just as this filter view is reconcilable with quantum mechanics, Kelly argues it is not at odds with the brain-sciences because the self exists in an intimate relationship with the body; just as a parasite is influence by the host, so is the self influenced by the body (p. 624). This is a poor analogy because a parasite often dies when separated from the host, but Kelly wants to say consciousness can exist without the body. Whatever the case, the filter theory allows for changes in the brain's chemistry to impact the psyche. Only adding to the author's aspiration for a truly interdisciplinary and integrative approach to the study of consciousness is their willingness to involve 'religion' and 'science' what we think will ultimately prove most helpful in catalyzing further theoretical progress will be thoroughgoing application—determined and disciplined, but also sympathetic and flexible—of Western-style scientific imagination to the to the phenomenological realities revealed by the great contemplative traditions, both East and West. We need to chart more fully and accurately the natural history of these 'higher' or 'deeper' subliminal realms' (p. 638). For someone such as myself who studies Hindu views mind, body and consciousness, these are refreshing statements indeed.

Despite its clarity, IM does tend to lapse into unnecessary polemic; too much ink was spilt bemoaning dogmatic materialists who simply will not take an unbiased view of paranormal science. Although one can sympathize, I found myself skipping long passages that kept repeating the same message in different words. Perhaps the space could have been devoted to garnering support from those who are neither fanatically materialistic nor fully involved in the study of non-conventional subjects like reincarnation, mysticism, etc.

Some questions not answered in IM: What causes the intimate relationship between the consciousness and body? What makes the linkage strong, or in some cases, weak? Why, if what they say is true, do I exist within this body rather than some other body? Nor is it clear (and the authors do recognize this problem), 'which aspects of 'cognitive unconscious' go with the brain, which with the associated [disembodied] psyche, and how their respective contributions get coordinated' (p. 629). The solid philosophical and empirical foundations laid in IM provide an excellent basis on which to further approach an answer to these questions.

Dr. Jonathan Edelmann
is a Junior Research Fellow at Harris Manchester College, Oxford

Advancing Well-Being
David Lorimer

HAPPINESS
Richard Layard

Allen Lane, 2005, Penguin, 2006,
310 pp., £8.99 p/b
ISBN 978 0 14 101690 0

A GOOD CHILDHOOD
Richard Layard and Judy Dunn

Penguin, 2009, 239 pp., £9.99 p/b
ISBN 978 0 141 03943 5

Back in the 1970s, when I first learned economics at University, lecturers used to speak of consumers maximising their satisfaction, other things, of course, being equal - which they never are. Richard Layard is an economist from the LSE, who founded their Centre for Economic Performance, and now directs its programme on well-being. A friend told him that publication of his book on happiness, subtitled 'lessons from a new science', would change his life, and it certainly has. The central question that he investigates in this book is why we are no happier than we were 50 years ago, even though most of us are better off in many respects. In other words, what is the relationship between economic growth and happiness or well-being? He approaches this issue using not only economics, but also philosophy, psychology and neuroscience in an evidence-based search for answers. His philosophical roots are in the utilitarianism of Jeremy Bentham, who is quoted at the end of the book in a remarkably clear injunction: 'create all the happiness you are able to create: remove all the misery of you are able to remove'. The structure of the book is an analysis of the problem, followed by a discussion of what can be done.

Common to both books is a critique of individualism which also argues that we need the concept of a common good, towards which we can all contribute. Excessive individualism believes that it is the prime duty of individuals to make the most of their own lives rather than contribute to the good of others. However, self-realisation is not enough, and psychological research finds that unselfish people are on average happier than those more preoccupied with themselves. Behind this lies the economics of Adam Smith's invisible hand, whereby the good of all is supposedly promoted by each individual pursuing their own interests. This leads to an emphasis

on competition, rivalry and status, which is one of the principal reasons why we have not become happier, since we are constantly comparing ourselves with others and are goaded on to making new purchases. Hence one secret of happiness is to ignore comparisons with more successful people, comparing downwards, not upwards. We find ourselves on what he calls the hedonic treadmill, which encourages us to invest more time in acquiring new possessions at the expense of our leisure.

Layard discusses what he calls the seven factors affecting happiness, which also reappear by implication in the second book. These are family relationships, financial situation, work, community and friends, health, personal freedom and personal values. Running through society as a whole, and related to its overall level of happiness is the question of trust, which is one of six factors explaining most of the variation in happiness between countries. He argues that the greatest happiness should be an overriding policy goal, so that we should seek the greatest happiness of everyone, with each person's happiness counting equally; this entails the two foundations of sympathy for others and impartiality, which also reflected in the Golden Rule. Moving on to cost benefit analysis, he also explains how behaviourism led to a much narrower concept of happiness in the 1930s, which one can see reflected in the broad assumption that economic growth advances well-being. It is now time to implant the findings of new psychology, including positive psychology into economics - for instance the fact that people hate loss more than they value and equal gain. At a practical level, Layard recommends that progress of national happiness should become a policy goal to be measured and analysed as closely as GNP.

An emphasis on values and the inner life can be found in both books. The second book is the recent landmark report by the Children's Society and is even subtitled 'searching for values in a competitive age'. Some of the indications in the first book are already being put into practice with government programmes on social, emotional and affective learning, although, as we found out from Carol Craig at our recent Mystics and Scientists conference, but there is some controversy about the validity of the research on which this is based. However, one can agree with Layard that all children benefit from acquiring inner strength. Children also need to acquire a moral vocabulary, which is one of the outcomes of the Learning for Life Values Poster Programme, where they also cultivate positive qualities and realise the value of resilience. Hence schools can help train the habits of the heart as well as the powers of the mind, becoming values-based communities.

The report as a whole makes essential reading for anyone working in education and with young people. The needs of children for loving families, friends, a positive lifestyle, sound values, good schools, mental health and sufficient money are addressed within its structure. The starting point is not dissimilar from the first book in emphasising the benefits of modern lifestyles for children, yet there is also a downside in terms of exposure to commercial pressures, violence, stresses at school and increasing emotional distress. Each chapter contains analysis, with references, and recommendations at the end. For instance, that an authoritative style of parenting is best and that ways should be found to encourage exercise and reduce teenage consumption of alcohol. It was rather shocking to discover that 20% of 15-year-olds questioned had been drunk in the week before; and, as we know, obesity has increased sharply over the last 10 years. Schools obviously have a profound effect on students, and teachers should be incentivised to apply for posts in difficult schools, especially in view of the finding that teachers account for up to 30% of variation in students' progress.

It is very clear from the research that early intervention is much more cost effective for children in difficulty. The report concludes that a better world for our children is based on two words: love and respect, with recommendations based on evidence. This puts the onus on parents and teachers to put human relationships above all else, and serve as examples of selflessness and harmonious living. The report recommends as a guideline: what one would do if our aim was a world based on love? There are also specific conclusions addressed to parents, teachers, government and media. At a time when many people are reflecting on the role of material acquisition and the reasons why we find ourselves in a financial and economic crisis, these books are an important point of departure for us to reflect not only on our economic and education systems, but also on the kind of society we wish to live in and the true nature of human fulfilment.

Am I Conscious Now?

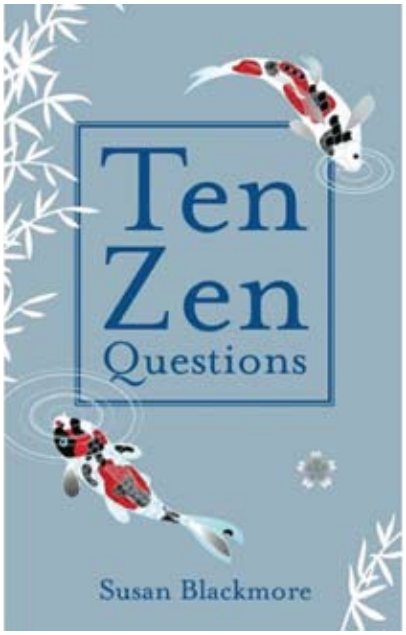
Peter Fenwick

TEN ZEN QUESTIONS

Susan Blackmore

One World Publications, 2009.
181 pp., £12.99 h/b
ISBN 978-1-85168-642-1.

For 25 years Sue has been sitting on her Zen cushion leading a Zen life in parallel with her academic life, and those of us who have known her over this period have seen the slow seeping out of Zen knowledge into her work. We remember the time when she would insist that she was not conscious, indeed, insist that she was not there, professing (with great charm) the absence of her 'self,' and rigorous in her scientific understanding that the self was a construct, and only a construct. There is no 'I' that perceives, or acts, or thinks, although there are of course actions, perceptions, and thoughts. It is easy to see in retrospect how, in her book on NDE experiences *Dying to Live* (1993) she could only take the position that the self is a construct living in a constructed world with constructed phenomena, and so the NDE is only another transient construction. One of my first tangles with Zen Buddhist understanding was encapsulated in the almost koan-like 'How does the Zen master choose his tie?'



For if the self is simply a construct, then the poor Zen master will never choose his tie and I am sure would be relived at the current trend in sartorial elegance, where ties are no longer necessary, indeed, deemed reactionary. But that doesn't help. How does the Zen master choose his tie? To find the answer, turn to Sue's *Ten Zen Questions*.

Let me say straight away that this book is a delight. She starts with 'Am I conscious now?' Then, with the laser of scientific discipline, starts to unpack that very simple but yet profound question. That leads seamlessly on to the next question, 'What was I conscious of a moment ago?' Next she asks, 'Who is asking the question?' This strikes at the central concept of Who am I? and is followed by the intriguing questions of Where is this? How do thoughts arise? and then questions concerning time and memory.

A true scientist has a laboratory. Those of you who have been on a Zen retreat ('sesshin') know only too well and painfully that the laboratory of the Zen initiate is the Zendo. Here you sit on your cushion with your left leg crossed over your right, both heels touching the cushion, full lotus for those who came to Zen early in life and preferably have an oriental gene in their make-up (did you know that the oriental hip has a different angle to the Western hip, thus making a full lotus easier?), half lotus for most and a few (those of us over 70 for example) who will never achieve even that.

Sue's Zendo is her garden shed. This is her crucible of illumination, and there are wonderful descriptions of the activity of her mind as she sits there looking out on her garden with its flowers, and with her cat purring – was that a purr she heard? - beside her. But every Zen pupil also needs a tutor, and Sue has been lucky in finding a Zen Master, John, and being able to sit in sesshin with him in the mountains of Wales.

As Sue follows the Zen trail she comes up against the confusions many Zen students will recognise. These arise as the sense of the constructed ego slowly falls away and the student comes more and more into the present moment, sitting closer to the point of perception. By the time the perception has been processed by the brain, thoughts and concepts arise, and, as the Buddha said, When the opposites are present, the Buddha mind is absent. In the initial stages of letting the mind still, and coming closer to the true nature of reality, it is even more difficult to understand who we are, as we are not.

On one occasion, Sue notes that in her existential difficulties she asked the Zen master 'If the acts appear to flow from me, but I don't do the acts, then who is responsible?' To which the answer was, Take responsibility. Which adds another layer of confusion to the understanding of the Zen mind.

When she reaches the questions When are you? Are you here and now? What am I doing? Sue comes to the very edge of recognition of how perceptions arise and she is able to look over into the void from which they arise. I found myself willing her to jump into this void as I read the book, so that she could finally give up the ego and reach sartori, or enlightenment (awakening). In my enthusiasm I stupidly sent an email to Sue asking, 'Why didn't you jump?' To which the answer came back, There is no you to jump. She could have added, and no void into which to jump.

Finally she comes to those fundamental questions we all have but on which few of us work as hard as Sue has done on herself to answer. Will I be reborn? Will I live after my body has died? Will I go to Heaven or Hell or indeed anywhere? Or will my consciousness just be snuffed out like a candle? She points out that at the heart of this is the great question of self and the moment. 'John has always said to me, Let it come, let it be, let it go; and it is the self that prevents this'. She realises that the moment is full of arising and falling of perceptions but there is no 'I' to see them, no 'I' to hear them: they are not happening to her; they are simply happening.

Sue sent her manuscript to her Zen teacher and he read it through and commented on it from the Zen perspective. John flags up the age-old issues in Zen enquiry: what are the covert assumptions that the student brings to the study? How do these positions structure perception and create the world in which the student lives? He points out that at times in her study Sue had been 'picking and choosing,' forgetting the ancient warning in the Hsin Hsin Ming 'the great way is not difficult for those who do not pick and choose'. If you already have some understanding of Zen, I think you might find it interesting to start with this final chapter, 'Response of a Zen Master' and then go on to Sue's analysis. If you are a Zen novice then I suggest you follow Sue's path in her questions and her discoveries. I shouldn't give you Sue's conclusions as it will spoil the journey for you, and I do really want you to read her book. Perhaps I won't be giving too much away to say that the closer you get to the point of perception, the greater is the understanding that perception arises, is, and goes. And that is what it is.

Sue, I know that you are not there, and in thinking that I can feel the blow of the Zen master's stick on my shoulder, reminding me that in our many meetings you have arisen, existed and disappeared, but I am delighted to recommend your book, which has arisen before me (if there was a me in front of which it could arise). It should be compulsory reading for anyone in consciousness studies and certainly on every psychology course. If psychology and neuroscience graduates could bring the level of honest perception that Sue achieves to their understanding of themselves and their subject, consciousness research would follow an entirely different and more progressive path.

Dr. Peter Fenwick
is President of the Network.

A Japanese Frame

David Lorimer

NEAR-DEATH EXPERIENCES

Ornella Corazza (SMN)

Routledge, 2008, 170 pp., £17.99 p/b
ISBN 978 0 415 455520 6

Most readers of this Review will already be familiar with at least some of the literature of near death experiences, which now dates back over 30 years. The focus of this new book by Ornella Corazza is the mind-body connection, introducing Japanese perspectives on this issue and contrasting them with our own Western understanding. A quotation from William Blake provides the thesis of the book: 'Man has no Body distinct from his Soul: for that called Body is a portion of Soul discerned by the five senses, the chief inlets of Soul in this age'. Ornella tries to steer a middle course between mind-brain identity and dualistic theories separating mind and brain, proposing 'a non-dualist, non-reductionist view' that is strongly influenced by Japanese theories of mind-body relations which

reject any version of dualism, insisting that although mind and body may be conceptually distinguishable, they are not ontologically distinct. She stresses the importance of what the Japanese call 'between-ness', which has much in common with a Western phenomenological approach.

The book gives many examples of the afterlife journeys from different cultures, at the same time analysing the nature and prevalence of the NDE, drawing on many examples. She cites OBEs from Hiroshi Motoyama, introducing the idea of Place as a core aspect of the NDE, which is developed in later chapters - experiencers travel to another place. It becomes clear that these afterlife journeys are culturally structured, which is equally true in the Japanese cases. Ornella describes the results of a small study she carried out in 2004, noting their salient features and the fact that every experiencer interviewed was sure that it was more than a dream. She puts these Japanese cases in the context of the myth of creation and comments on the significance of the river as a point of no return. Reflecting the integration of mind and body, Japanese culture makes no clear distinction between life and death, an interesting example of which is the Cherry Blossom Festival, one of the most important events of the year. It serves as the ultimate reminder of the beauty and impermanence of human life.

The next two chapters report on experiences involving ketamine, comparing them with NDEs. The populations are very different, but there are many similar features in the experiences, for instance in connection with time, vision, the light, peace and joy, and unity with the universe. The reader gains a vivid appreciation of ketamine experiences through many examples, while some of the after-effects are also similar. Using the NDE scale and developed by Bruce Greyson, all the features are present in the ketamine experiences, although not all users have experiences similar to NDEs. Ornella then compares the two sets of experiences. Fewer ketamine experiencers report encounters with other beings or a vision of the Light, but more ketamine experiencers report being one with the Cosmos. Does this mean that both these sets of experiences are created by the brain? Some researchers suggest that both events involve NMDA receptors, but this in itself may be a facilitating condition rather than a cause. The findings are not conclusive in this respect, but they are consistent with the idea of the brain as a transceiver. Ornella considers the three main forms of explanation – reductionist, psychological and transcendental, criticising each in turn. The transcendental hypothesis, for her, loses sight of the wholeness of mind and body. In this connection, she quotes from a document by the Church of England Doctrine Commission that the essential human being is an embodied whole so that our ultimate destiny must involve the transformation of our entire being rather than a separable soul. For me, the limitations of this way of thinking lie in restricting the notion of body to physical body, rather than envisaging other forms of body, as indeed St Paul does in his letter to the Corinthians when talking of a spiritual body. In any manifest world there must be distinct forms, so that body represents the outer form of the inner principle of consciousness. These things, however, are seen differently by the Japanese.

For the Japanese, the word place (basho), underpinning their understanding of space, indicates the ground of our being, like a tree in the garden. Nishida explains that the 'basho wherein the object is implaced must be the same basho wherein the so-called consciousness is also implaced'. At a deeper level, basho becomes a container or envelope for various kinds of experiences, including the NDE. Intriguingly, Swedenborg, writing in the 18th century, described changes of state in the invisible world as corresponding to changes of space in the physical world; hence motion takes place at the speed of thought and the mind is immediately in the place imagined, a pattern confirmed by more modern experiencers such as Sir Auckland Geddes. In a world of thought, to think is to move.

In the last chapter, Ornella invites us to reconsider our notions of embodiment. Already, Rupert Sheldrake's work suggests a mind extended beyond the body has a field, while the work of Yasuo Yuasa regards the living body as a system of information (here, Western phenomenology comes in again) at different levels or expressing itself in different circuits - external sensorimotor, the combination of somesthesis and kinaesthesis (coenethesis, the system of self-apprehending sensation in one's body), and emotional- instinctual. To this, Ornella adds a fourth circuit which she calls the unconscious quasi-body, a path of emotional energy flowing in the unconscious. Within this general scheme, ki or chi energy is an intermediary psychophysiological form that arguably mediates between what we call mind and body. This is a mind-stretching stuff, but a hugely valuable exercise in moving out of one's habitual thought patterns. For Ornella, all these experiences are indications of a deeper intelligence that is immanent not only within ourselves but within all creation. A highly stimulating read.

Teaching the Group Mind

Graham Dunstan Martin

THE LIVING CLASSROOM

Christopher M. Bache (SMN)

State University of New York Press, Albany, 2008, 254 pp., $65.50 h/b, $21.95 p/b, ISBN 978 0 7914 7645 1 (h/b), 978 0 7914 7646 8 (p/b)

Bache tells us he has taught survey courses in religious studies for nearly 30 years, in a 'second-tier state university' with a 35% intake of what we in Britain term 'mature students'. He loves teaching, and is clearly good at this essential and rewarding job. He realizes (as we all should) that teaching is most successful when it is relevant – not relevant in the crude and pedestrian way in which this word is misunderstood by, say, politicians, profiteers and materialists of all hues – but relevant to the student's understanding of his or her own life, its meaning and its values. The conveying of information is merely one of the functions of education, for it is also, and more deeply, a personal search, a questioning of hitherto 'sacred truths', a life-transforming quest. As he says, 'educators must teach the whole person'. Moreover, the educator's own whole person is on the line when s/he teaches. He quotes Parker Palmer: 'Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher'. Risks must be taken, to allow creative eureka moments to emerge. Rightly, he regards the teacher too as never ceasing to learn: 'Life is about growth, not fixed success'.

So far every good teacher would agree with Bache. But he has more unusual things to tell us, namely that as time went on, an apparent telepathic / sympathetic communication began to

develop between him and his students. A lesson would then come alive. Since he was still new to teaching at the time, this was almost alarming. Briefly, 'not only were students finding pieces of their lives in [his] lectures, but [...] these often touched sensitive areas in their lives'. He concluded that, when teaching was going well, remarkable things were happening 'off-stage', as if the needs and experience of students and teacher were in touch telepathically. His first chapter contains an account of how he and his students began to be aware of these shared experiences. And he devotes his last seventy pages to some striking excerpts from the students' own accounts. Among some interesting NDEs, these include some paranormal events, are moving, thoughtful – and in one case poetic.

The book is subtitled 'Teaching and Collective Consciousness'. I am not sure however whether it is literally exact to speak of 'consciousness' here. By his own detailed descriptions of events in his classroom, it seems clear that he is proposing a collective intelligence, which enables separate consciousnesses to communicate at an unconscious level: this material then emerges fully into the individuals' awareness. Bache criticizes the dominant materialist view for asserting the absolute separateness of consciousnesses from each other. At the same time he defends individuality, saying that it 'does not require ontological isolation'. He is aware however that, in the light of quantum theory, and in particular of non-locality, there is every reason in physics why communication between separate consciousnesses might be possible. These experiences in the classroom have made me feel that Sheldrake's theories of morphic fields are particularly persuasive, since they propose the existence of mental fields permitting non-normal communication. He devotes a chapter to the discussion of such theories, along with the views of Dean Radin, Ervin Laszlo and other thinkers who will be familiar to members of the Network.

Since he believes that communication is going on at this hidden level, and since he is particularly impressed by the theories of Sheldrake, he explains that he gets ready for the next year's course not only by normal academic preparation, but also by 'preparing the field', i.e. the unconscious collective field which will be constituted by himself and his group of students. This process rather resembles prayer.

The only point that seems to me unclear is whether, at his university, the programme consists entirely of lectures and written assignments. Is such a thing as a tutorial known? Perhaps not, since (if I understand him correctly) he has replaced one of the week's lectures by 'Café Conversations' where students discuss in small groups, while he revolves among them. For naturally he understands the need for dialogue, and the collective sharing of views.

This book is to be recommended as the work of a remarkable teacher, whose description of the experiences of himself and his students is not only moving and thought-provoking but also a model of clarity.

Graham Dunstan Martin
is author of Mind Matters and Living on Purpose.

What Reincarnates?

David Lorimer

NEW CLOTHES FOR OLD SOULS

Guy Lyon Playfair (SMN)

Druze Heritage Foundation, 2006,
171 pp., £ h/b
ISBN 1 904850 09 X

THE SOUL GENOME

Paul von Ward (SMN)

Fenestra Books, 2008, $9.95 p/b
ISBN 978 1 58736 995 7

The empirical evidence for reincarnation comes from two main sources: children who remember previous lives and hypnotic regression. The former source has been more thoroughly tested, and is reinforced by a corresponding evidence from birthmarks, although there is also some persuasive evidence from hypnosis. In either event, profound questions arise about the nature of human personality which challenge orthodox assumptions about the nature of life and death. These two books are complementary, the first providing an introductory overview of the evidence collected over the last 40 years, especially by Ian Stevenson, while the second introduces a novel concept that we may have what Paul von Ward calls a 'soul genome' corresponding to our physical inheritance.

Guy begins with four cases suggestive of reincarnation before providing some literary background drawing on pioneering works written in the late 19th century at around the same time when Theosophy was becoming familiar in the West and translations were appearing of classical Indian texts. As those familiar with the literature will already know, distinguished people from different fields have been convinced that they had lived before, including Flaubert, Wagner, Goethe, Benjamin Franklin and even Henry Ford. It is interesting to note that belief in reincarnation has increased by about 10% to nearly 30% of the population during the period of this modern research. Even in 1974, Ian Stevenson was able to write that, although the evidence was far from conclusive, it was now sufficiently strong so that a rational man can believe in it; this is all the more true now, although the evidence still remains suggestive rather than conclusive. Guy evaluates a good many cases from around the world, showing that their main features are common. A particularly interesting case was investigated by the Brazilian writer Andrade, where a very young child remembers the accidental death of a previous personality and describes it in a narrative strongly resembling near-death experiences: 'then the person floats to a corner of the ceiling and watches as the doctor is struggling to save him. And then a big hole like a tunnel appears in the corner of a wall near me, trying to suck me in... when you are sucked through the hole and along the tunnel, you see a very strong flash of light at the end of it. It was so bright that I had to turn away'. It is striking that the child uses the first person to describe the experience.

In his concluding chapter, Guy poses eight questions about the evidence he has presented, which he then proceeds to address. He reminds us of incidents involving Sir William Crookes in connection with his investigations of Daniel Dunglas Home in the 1870s. Some of his colleagues told him that it was impossible, to which he famously retorted: 'I never said it was possible I only said it was true'. He added: 'If a new fact seems to oppose what is called a law of nature, it does not prove the asserted fact to be false, but only that we have not yet ascertained all the laws of nature'. This was also the conclusion of Alfred Russel Wallace, quoted later in the chapter. Wallace hypothesises that human beings consist of an organised spiritual form evolving coincidently with and permeating the physical body. Death separates this duality, but has no effect on the spirit, either morally or intellectually – this is exactly the conclusion reached by Swedenborg on the basis of his own observations. The larger picture is one of progressive

evolution of the intellectual and moral nature. What Wallace calls the 'organised spiritual form' corresponds to Andrade's 'biological organising model', which in turn Stevenson called the 'psychophore' and for which Paul von Ward coins the term psychoplasm.

All these terms build on the Aristotelian understanding of the soul as the form of the body, which Rupert Sheldrake would call the morphogenetic field. Paul defines the soul or psychoplasm as 'a genome-like, energetic and information bio-field that embodies a single being's knowledge, feelings and behaviour patterns that transcend space-time'. He argues that this concept has the potential to reconcile the physical and psychical dimensions of life. He begins by looking at a range of phenomena that do not seem to be fully explicable in terms of current theories such as prodigies, anomalous knowledge, precognitive dreams, past -life healings and lives that seem to mimic each other. He then draws on his graduate psychology courses on personality theory to construct rating scales for five aspects of personality which he thinks may form holographic psychophysical patterns transferable from one lifetime to another. These he calls the physical phenotype, the cognitive cerebrotype, the emotional egotype, the social personatype and the creative performatype. He uses a number of documented cases to frame his hypothesis. Among these are Paul Gauguin and Peter Teekamp, General John Gordon and Jeffrey Keene, Marilyn Monroe and Sherrie Laird, and Pitirim Sorokin and Lorin Kee.

His underlying hypothesis is that we live in a multidimensional and self-learning universe in which consciousness is fundamental and in some sense conserved, so that our collective experience can be built on rather than dissipated. The rest of the book considers in detail the results of comparative analysis of personalities against his rating scales, which are reproduced in the appendix. Some of the results are quite striking, for instance the comparison between drawings by Gauguin and Teekamp, as well as the structural mapping of faces of people who are not genetically related to each other. This is done in a systematic way by using standard techniques from facial geometry which can be statistically measured and analysed. So readers can assess some of this evidence for themselves. The resemblance between Gordon and Keene is particularly arresting.

The most intriguing question relates to the ostensible transfer of these personality structures. Diana Fynn describes the case where her deceased fiancé states that a part of him has gone forward into her grandson; in Jamaica, Elleke van Kraalingen made a similar statement about the relationship between Hermod Sverre (see report on Jamaica meeting) and her daughter. Perhaps a holographic model can help reconcile these perspectives involving both continuity and discontinuity: the psychoplasm hypothesis certainly helps to explain the data contained in both of these books, but a great deal more research will be required. In a wider sense, as Ramana Maharshi remarked, it is only Brahman that incarnates or reincarnates, and we are all aspects of the one life and mind as we forget and remember our deeper identity. These books both help us expand our understanding of the human personality.

The Miracles of Forgiveness

Kurt Dressler

THE DISAPPEARANCE OF THE UNIVERSE

Straight Talk about Illusions, Past Lives, Religion, Sex, Politics, and the Miracles of Forgiveness

Gary R. Renard

Fearless Books, 2003 / Hay House, 2004, 420 pp., p/b
SBN 1-4019-0566-8

YOUR IMMORTAL REALITY

How to Break the Circle of Birth and Death

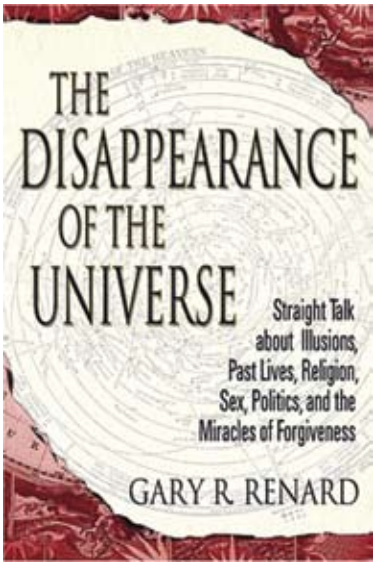
Gary R. Renard

Hay House, 2006, 223 pp., p/b
ISBN 1-4019-0698-2

These are the most extraordinary, mind-boggling, upsetting, authentic, convincing, deep, life saving and at the same time humorously written books I have ever read.

Read these books in the order in which they were published. Learn to relinquish judgment, to forgive others, to forgive yourself, to forgive the world, to undo your ego. Accept the help of the Divine Spirit to undo your unconscious guilt and let It help you to radically change your way of thinking. Practising this teaching can end your sufferings, make you healthier and appear younger. After overcoming your initial scepticism and non-amusement, your serenity level will likely go off the charts. This will benefit not only yourself but also those around you. And on top of it all, these books are not only captivatingly interesting but funny. Often I had to suppress my urge to laugh out loudly. These books might save you years towards more fully understanding and truly practising the principles of A Course in Miracles and might save you hundreds of years towards breaking the circle of birth and death, i.e. towards becoming an ascended Master, enlightened, One with Spirit, experiencing pure non-duality.

These books will teach you that only spirit is real, matter is illusion, in agreement with quantum physics. Let me quote from astrophysicist and quantum physicist Bernard Haisch's book *The God Theory. - Universes, Zero-Point Fields, and What's Behind It All* (Red Wheel / Weiser, 2006). Note the central sentence in this book: 'It is not matter that creates an illusion of consciousness, but consciousness that creates an illusion of matter'. In his review of that book in the Journal of Scientific Exploration, astrophysicist and quantum physicist Richard Conn Henry comments: 'That is correct physics: it is not controversial in the slightest degree that there is no reality; this has been demonstrated in both theory and experiment'. Elsewhere Henry writes: 'Galileo was able to educate the world to understand that the Earth goes around the Sun … yet physicists today have utterly failed to inform the public to understanding the purely mental nature of the universe, with all that that implies for the meaning of human existence. That is a tragedy, and it should be rectified. I wish I knew how'.



Well, for those who are not into quantum physics, Gary Renard's books offer a practicable spiritual approach. Renard is no academic. His message may be hard to swallow but not impossible to understand. He wouldn't have been able to come up with any of this himself. His Source is two ascended Masters who projected themselves bodily into his living room, seventeen times from 1992 to 2001, and their conversations with Gary are the substance of his first book, referred to by his readers as 'D.U'. (*The Disappearance of the Universe*). Then they continued to visit Gary eleven more times between 2003 and 2005 as reported in his second book, *Your Immortal Reality*.

The two ascended masters appear to Gary as a modern looking young couple. They appear on Gary's sofa out of the Reality which is pure spirit, beyond time and space. They come simultaneously out of our future and out of our past. Two thousand years ago they were friends of the teacher Y'shua, called Jesus in the Bible, and simply called 'J' by his close friends: they were the disciples Thomas and Thaddeus. Within our linear understanding of time they will be living on earth (again) in our future. Thanks to their knowledge of past and future they have some most interesting information to pass on.

Examples concerning the future: Gary's visitors give him some very impressive demonstrations of the timeless nature of reality and offer him various glimpses into the future, some incredibly surprising ones (like teleportation of humans), some encouraging ones (like technical and economic advances), and some too unpleasant to be spelled out here.

Examples from the past: Mary Magdalene and J were actually married for the last 15 years of J's life. (They had no children.) This illustrates just how much censorship had been applied, up to the 4th century, to the scriptures which finally became accepted by the Church. Some of J's original teachings were recorded by Thomas in his 'Gospel' as well as by a group around Stephen in 'Words of the Master', a source used later by two of the authors of the canonical gospels and referred to as 'Q' by biblical scholars. We learn what distinguishes these early original, genuine sources from the gospels written later under the influence of the apostle Paul. At the core of J's original teachings is that if you forgive, you experience forgiveness yourself (Matthew 6, 14-15). This is what the group around Thomas, Thaddeus, Stephen, and Mary Magdalene taught, while Paul and conservative Christians taught that forgiveness of sins depended on belief in the credos formulated by them, i.e. Christ having suffered on the cross for everyone's sins.

J said: Whoever drinks from my mouth shall become like me; I myself shall become that person and the hidden things will be revealed to that person (Gospel of Thomas, logion 108). The hidden things are explained by Gary's visitors, but they are most difficult to accept at first. The world of matter and bodies is a projection of the mind. It is an illusion, a dream. The only reality is spirit. In Reality there is only oneness. There is only one mind. All separation is illusion. This much mystics have experienced and known.

But J's teaching goes beyond that. In order to be enlightened and saved from future attachment to the world (i.e. from reincarnation, if you so believe), it is necessary to undo your ego, wake up from the dream of separation, and become radically forgiving in a new, advanced, 'quantum' sense, rather than in the old-fashioned, Newtonian, subject-object way of forgiving. The old way of forgiving went like that: 'o.k., I'm forgiving you, because I am better than you are, you're really guilty, but I forgive you, except you're still going to hell'.

J, on the other hand, knew a different kind of forgiveness that's the fastest way to undo the ego. If the world isn't real then there's nothing to forgive. You're not forgiving something that has really been done. You recognise that nothing has been done. You actually forgive yourself for dreaming that something seems to have been done. That is vitally important towards undoing the ego. I found this difficult to accept at first. The universe doesn't really exist. The outside world is a projection of my mind. The standard model of particle physics and cosmology with all its convincing beauty: a grand illusion? Gary's books will help you get used to the idea. Through practice of this advanced way of thinking you experience the truth of this teaching.

Gary's visitors know not only the histories of those times they themselves witnessed on earth. They seem to have all-encompassing, complete knowledge. Any way, they pass on many interesting historical details. Who really wrote the Shakespeare material? What about the Roswell incident? Life from Mars? What almost precipitated a Soviet all-out attack on the U.S. on September 26th 1983, and who stopped it? How did the pyramids in Egypt look originally? What about past technologically advanced civilisations on our planet? I could go on and on. These are just fringe benefits of reading these books. The essentials are the miracles of forgiveness. Finally, should this review have been trying on your nerves then simply look at it as 'jafo' (just another forgiveness opportunity).

Kurt Dressler *is physicist, former professor and dean of graduate programs at the Swiss Federal Institute of Technology, ETH Zurich, and former member of SMN Council.*
www.kurtdressler.ch

ecology-futures studies

Wu-wei – Tao in Action
David Lorimer

GENTLE ACTION
F. David Peat (SMN)

Pari Publishing, 2008, 174 pp.,
£9.99 p/b
ISBN 978 88956 04 039
see www.gentleaction.org

Since 2001, I have been a member of the International Futures Forum, originally sponsored by BP and set up on the premise that we live in a world that we cannot completely understand or control. This thought informs the new book by David Peat and related work by Margaret Wheatley,

which considers the implications for organisations of insights from new scientific ideas. A more recent book in the same field on Gaian democracy distinguished between so-called tame and problems. Tame problems can be addressed in a more or less linear fashion, while problems are resistant to this kind of approach and may even intensify as a result of intervention. This is what Karl Popper referred to as unintended consequences, of which there are many examples in the policy field. This book begins with one, where the Zambian government arranged for a crop of tomatoes to be planted near a river. Just before they were ready to harvest, the entire crop was devoured by neighbouring hippopotamuses and the whole project was a disaster. It is easy to see that the planners had a blind spot, which David refers to as 'missing information' within a complex system that we have not fully understood.

With the best of intentions, things can easily go wrong. David explains that we feel uncomfortable when surrounded by uncertainty. We want to remain in control, so we intervene when things don't go according to plan. However, our interventions may reflect a distorted or inadequate understanding of the situation, and the basis on which we operate may be limited or over rigid. Hence the solution imposed may be inappropriate or the action disproportionate. The rest of the book addresses how this state of affairs can be transformed, and involves an initial 'creative suspension' of action, in order to develop a clearer understanding of the situation. This is exactly the process that we use in the IFF in addressing intractable problems. It may be necessary to sit in the confusion for awhile and not jump to quickly into action. In addition, past experience may not provide the best basis for tackling a new situation.

Lying behind this potentially dysfunctional thought pattern is an attitude to nature that we have developed over the last 300 years. We see ourselves as objective observers outside nature, which we think we are in a position to predict and control in a mechanistic fashion. Many technological developments have resulted from this way of thinking, but it blinds us to the fact that we are ourselves often part of the system which we are trying to act upon and manipulate. In other words we are conscious participators rather than passive spectators. It is important that we familiarise ourselves with a new scientific ideas such as complexity and chaos theory, self-organisation, attractors, the butterfly effect, intermittency and coherence. The book is full of examples of the unintended consequences of actions, ranging from the introduction of rabbits to Australia to MRSA through economising on cleaning in hospitals, and the social consequences of tower blocks. It is easy to see how and why these actions did not work with hindsight, but the real lesson lies in how to anticipate similar complexities in the present. Hence the rationale for gentle action as a whole.

One context is the tendency of rigidity in organisations and their management. Fragmented thinking can also prevent people from joining up the implications when parts of the system do not communicate well with each other, for instance in the case of transport, where local produce is often shipped around the country before reappearing in a supermarket 2 miles from where it was grown. Limited perception can also distort our understanding, as in the tragic misidentification of Menezez, who was shot in on the London Underground. David recommends creative suspension, whereby unexamined assumptions can be brought into conscious awareness and new patterns are allowed to emerge. This can sometimes be facilitated through Bohmian dialogue, which in many ways reflects the Native American process of arriving at a consensus within a traditional talking circle. We are usually in too much of a hurry to try out such processes.

An important chapter discusses the relationship between trust and ethics in a number of different fields like medicine, science and policing. Trust is an important form of social capital, and breeds loyalty within organisations. David gives some interesting examples of trust in business, for instance with a Marks & Spencer. Implementing a system of trust, loyalty and ethics led to many savings and a high degree of retention of employees, who spontaneously adopted responsible behaviour and their own cost-cutting measures. This helps create a virtuous circle within the company. Other examples are given from David's home village of Pari in Italy, where it is common for people to offer to defer payments and to say that they are happy to do so. He also mentions the link between social happiness and trust, which forms part of what he calls our social ecosystem.

The final chapter draws comparisons with the Chinese term wu-wei, representing action as flow and harmony with the surrounding context. Gentle action, as he puts it, does not seek to impose change externally and at a particular point in the system, but operates 'within the dynamics and meanings of the entire system' in a harmonious fashion. This is the action of nonviolence, or initiatives such as the Grameen Bank and 'each one teach one'. The overall message of the book is that we can each engage in informed and effective gentle action if we come to understand how we form part of systems that are interlocking, nested and connected, with continuous feedback into each other. This book should be required reading for policy makers, business people and politicians around the world - they might begin to wonder if it is occasionally better to refrain from action rather than intervene at all costs and exhaust themselves in the process.

Socio-Ecology

David Lorimer

HOW THE RICH ARE DESTROYING THE EARTH

Hervé Kempf

Green Books, 2008, 124 pp., £7.95 p/b
ISBN 978 1 900322 41 6

Hervé Kempf is the environmental editor of Le Monde and founder of Reporterre, and his powerful book has already achieved bestseller status in France. His fundamental contention is that we must understand the ecological and social crises as two aspects of the same disaster arising within a system 'that has no drive other than greed, no ideal other than conservatism, no dream other than technology'. The dominant social stratum - a 'predatory oligarchy' - is the main agent of the global crisis through the decisions

it makes favouring material growth, which Kempf argues enables the subordinate classes to accept the injustice of their social situation. The problem is that this very material growth intensifies environmental degradation. Hence ecological concern has to be allied to what the author calls a radical political analysis of current relationships of domination. We all know the trajectory of future trends, yet we continue in the same direction, as responses to the recent financial crisis have shown: further economic growth is supposed to be the panacea when this ideology has landed us in our predicament in the first place. In a powerful metaphor, the author reminds us that PCBs can now be found exuding from fish carcasses at the bottom of lakes. During their life cycle, they accumulate these toxins in their systems, which then pollute the lake and their progeny. Since we are at the top of the food chain our bodies correspondingly accumulate these contaminants, so 'we are all salmon now'. This is one of the principal factors underlying the current obesity epidemic.

Although much of the political focus is on climate change, it is vital to remember that environmental disturbances are in fact aspects of a single systemic crisis, which the author persuasively argues are a direct consequence of the present economic system. Part of the predicted shakeup in the global economic system has already arrived (the book was published in 2007). Despite the worsening indicators, little real progress is being made as we still insist on using economic indicators divorced from the ecological context. Economic growth does not defray the cost of environmental destruction. The author paints a grim picture of the Guatemala city dump and the surrounding poverty, which we in the West do not experience, but which is vividly evoked in a relatively recent book entitled *Planet of Slums*; the book reminds us that the poor live in the most polluted places. Despite this, the rich have been getting richer over the last 25 years, which gives the lie to the trickle-down theory of economic growth; in fact, it is more like trickle up.

The next chapter details the income and lifestyle of the rich oligarchy, and some of the figures cited beggar belief. A key component of Kempf's argument comes from the early 20th century Norwegian economist Thorsten Veblen, that the propensity for emulation is a pervasive trait of human nature, and that we all tend to aspire to the superior status and power exhibited by the rich. The wealthy leisure class still defines the lifestyle of its era and encourages ostentatious rivalry, which surely has deep evolutionary roots. Their example drives general consumption up by impelling others to imitate it, while the oligarchy continues to insist that economic growth will 'lift all boats', to use another well tried metaphor. One drawback is that this growth does not in fact create a sufficient number of jobs even in China, and everyone knows that we are currently experiencing the downward spiral of this process. The author restates the argument that the richest billion people must reduce their material consumption, but he thinks it will be necessary to change the cultural standards of conspicuous consumption in order to achieve this outcome.

A further twist is the attack on democracy which has been going on in the name of the war on terror and the mantra of enhancing security, used as the justification for video surveillance, genetic signatures and identity cards. The cell phone now enables people's movements and communication to be tracked with great accuracy. There has also been a tendency to criminalise political protest. Disturbingly, the author shows how the paradigm linking freedom and capitalism dissolved during the 1990s as the oligarchy realised that democracy had become antithetical to their objectives of increased control. There is a real danger of increased authoritarianism as the various crises intensify and new security measures are brought forward. The book does not end on a note of resigned pessimism, but rather calls for an understanding of the objective of achieving a society that limits its material consumption so that we can plot a course and accomplish the transformation equitably. There are, however, powerful forces ranged against this, so that it is more likely that we will experience breakdown before breakthrough. However, significant numbers of people are aware of the unprecedented situation in which we find ourselves and the absolute necessity of rethinking our relationship with nature and with each other. This radical book gives a strong impulse towards a different and more sustainable future.

general

A phonensic examination

David Lorimer

DEBUNKING 9/11 DEBUNKING

David Ray Griffin

Arris Book, 2007, 392 pp., £10.99
p/b – ISBN 978 1 844 370696

9/11 CONTRADICTIONS

David Ray Griffin

Arris Books, 2008, 346 pp., £9.99
p/b – ISBN 978 1 84437 073 3

THE NEW PEARL HARBOUR REVISITED

David Ray Griffin

Arris Books, 2008, 358 pp., £12.99
p/b – ISBN 978 1 84437 076 4

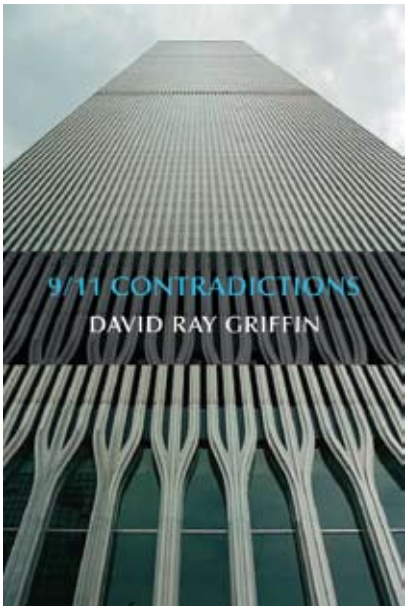
This is the fourth review I have written on books about 9/11, almost all of them by David Ray Griffin – the last appeared in the April 2007 issue, and included a review of a book about the general nature of conspiracy theories and the rhetorical way in which the term is often used. For those who have not followed the whole process, David Ray Griffin is emeritus professor of philosophy of religion and at Claremont School of Theology and author of a series of books on process philosophy and parapsychology. He first got involved in the study of 9/11 when asked to write an article for a magazine. Like most people and perhaps many readers of this review, he assumed that the official account was both adequate and plausible. However, the father he dug, the more incredible the official version seemed to him. This resulted in his first book published in 2004 and entitled *The New Pearl Harbor.* Following the publication of the 9/11 report, Griffin published a devastating critique highlighting a vast number of errors and omissions and arguing, persuasively in my view, that the report simply assumed the correctness of the official account, and was charged with backing up; in other words the conclusion was already preordained in the premises. There are also books of essays giving the wider context and suggesting that 9/11 contained many of the features of false flag operations. It is significant, I think, that insofar as people have changed their minds about the explanations for 9/11, conversions go in only one direction, away from the official story. It is important to note that the outset that the official

version is also a conspiracy theory, and one which turns out to be a great deal more shaky than what defenders of the official theory disparagingly call conspiracy theories. On issues relating to evidence and argument, the best unofficial theories turn out to be much stronger. These new books contain over 1000 pages of analysis, which include 200 pages of notes and references. All this enables the reader to get to grips with the detail.

The first book is a response to the defenders of the official conspiracy theory, including the book by Popular Mechanics, which I reviewed two years ago. The other chapters address the question of whether certain tapes verify the 911 commission report, points raised by the authors of this report and whether NIST has in fact refuted the theory that the towers – and particularly WTC 7, which was not hit by a plane – came down through controlled demolition. In the introduction, Griffin tells his own story, reminding the reader that over 40% of Americans believe that the government has concealed critical evidence that contradicts the official explanation of the attacks. Under normal circumstances, one would expect the kind of evidence presented by Griffin to come out in the press, but there has been a serious lack of investigative reporting. Indeed, the press has generally uncritically accepted the official theory while attacking those like himself trying to draw attention to the problems. They use the term conspiracy theory one-sidedly, assuming that it equates with woolly and wishful thinking, and they accept the assumption that if a document is written by scientists, it must be a scientific document. This means that, on the whole, the quality of evidence and analysis is ignored. Even a cursory reading of the quality of Griffin's analysis in relation to the evidence will convince the impartial reader that there are real questions to be pursued, and that the investigations up to this point have been incomplete and inadequate. Some critics go so far as to ignore Griffin's own explanations, commenting that he was thoughtful and well informed until he began to recycle what they regard as wild conspiracy theories. In saying this, Griffin responds that the reason he originally held the official conspiracy theory was that he was not well informed enough, which he now is; and the reader will certainly be well-informed after reading these books. A particularly telling example of the tactics used is when commentators appeal to the authority of official documents, using perfectly circular logic: alternative conspiracy theorists believe the government was responsible; but the government's reports and other studies that support them say that the government's conspiracy theory of 9/11 is accurate; therefore the major assertions of the alternative theorists are baseless.

The second book addresses the internal contradictions within the public story about 9/11. No judgements requiring expertise are required, because each of the 25 chapters revolves around a simple contradiction; this book contains no new theory about what actually happened, but only a simple exposition of the various facts. It is a matter of simple logic that if a person claims that 'P' is a fact, and someone else that 'not P' is a fact, then one of these claims must be false. The reason for the structure of this book is that members of Congress and the press have been reluctant to look into possible difficulties about the official story from fear of being labelled conspiracy theorists. However, they cannot be pilloried for pointing out factual contradictions, which abound in each of the 25 chapters and naturally lead to questions that need to be resolved. Griffin discusses how any contradictions have been handled, showing that they are more often than not ignored. For instance the testimonial evidence from police and firefighters that there witnessed explosions in the towers is ignored or even denied. And the claim that Hani Hanjour piloted Flight 77 into the Pentagon is inconsistent with everything else known about his flying ability. The conclusion summarises the 25 contradictions and reminds the reader of the standard criteria within philosophy of science for a good theory: that it should not be inconsistent with any of the relevant facts, and that it should be self-consistent, free of internal contradictions. Here there are 25 such internal contradictions, which makes the official theory not logically unacceptable.

The last book – provocatively subtitled 9/11, the cover-up and the exposé - provides a chapter-by-chapter update of Griffin's original book, showing that the case against the official report by a growing number of independent researchers is now much stronger than five years ago. The emerging consensus in the 9/11 truth community is that 9/11 was a false flag operation subsequently used to justify the war on terror. The last chapter in Griffin's original book provided a summary of points indicating government complicity and comparing the plausibility of the complexity hypothesis with the coincidence hypothesis. Here in Griffin adds a further 33 points of evidence to his original 24, making the coincidence theory even more improbable than it was before. It turns out that the executive director of the 9/11 Commission, Philip Zelikow, not only determined its conclusions in advance but was also the primary author of a 2002 document on national security strategy, which used 9/11 to justify a new doctrine of pre-emptive warfare; hence he had a clear conflict of interest, which he did not declare. He even attempted to insert sentences linking Al Qaeda to Iraq. This new chapter reinforces Griffin's original case that the Commission systematically omitted and distorted evidence that suggested that 9/11 might have been an inside job. Hence, together with the NIST report, the reader can see that the two most important official documents were prepared and directed by partisan White House insiders. Hence the demand for a new and genuinely independent investigation. If Griffin's conclusions are correct, then the Bush administration was complicit in one of the most outrageous crimes against humanity, and should be brought to account. Whether this will happen and whether there will be a new and independent investigation is up to pressure from the American public opinion.



Was it Something we Said?

Martin Lockley

THE UNFOLDING OF LANGUAGE:

An evolutionary tour of mankind's greatest invention

Guy Deutscher

Metropolitan Books, Henry Holt and Co, New York 2005, 358 pp $26.00 h/b ISBN 0-8050-7907-6

'Language is mankind's greatest invention - except, of course, that it was not invented'. If this is true, as Guy Deutscher asserts on good authority, then spontaneous generation of language - the trait that makes us human - is just as mysterious as the origin of the species some 50-75,000 years ago. Although speculation about the linguistic ability of *pre-homo sapiens* ancestors may seem like pure conjecture, given the lack of written hard copy before 3000 B.C., Deutscher convincingly unveils some of 'language's secrets' and dismantles 'the paradox of the great uninvented invention'. Success in this quest relies on linguistic understanding of the inherent structure of language which in turn arises from the perennial human inclination to impose order on speech for the purposes of convenience, clarity and emphasis. Such language-creating modes of expression arise repeatedly and with lawful regularity in almost all languages. Hence linguistics has it own scientific norms, laws and triumphs ranging from Williams Jones' demonstration of the relationship between Sanskrit, Greek and Latin, to Ferdinand Saussure's revolutionary theory of 1878 (which held that all vowels diversified from a single 'e' in ancestor languages), to Grimm's Law (recognising the weakening of k > ch > h in proto-German, around 500 B. C.), on down to the Great English Vowel Shift of the 15th century. Explaining such linguistic intricacies can be heavy going, but Deutscher mostly maintains a pleasing, light touch.

In the 1850s August Schleicher proposed that languages 'are natural organisms which emerged independently of man's will' thus manifesting a cycle of growth and decay. This view reflected the prevailing, perennially recurring, but flawed, notion that languages have only devolved since 'a Golden age of Perfection'. (This leads one generation to lament the decadent speech of the next with such sentiments as I once heard, most ironically, from an uneducated cockney on a day trip to Calais. This gal complained of the local gendarme ' 'e don't speak English proper like what we do'.) Languages are indeed living natural organisms, as Schleicher proposed, but they also, as Deutscher shows, construct and deconstruct themselves constantly. (It seems to me that linguistic evolution and devolution strike an almost perfect compensatory balance as they do in the homeostatic maintenance of the physiological body). For example, following Goethe's dictum (also not mentioned by Deutscher) that 'all is metaphor' we see how simple metaphors, especially those having to do with time and space (especially the orientation of the body), and essential functions like eating, get adopted, diluted and abbreviated by use to the point where they need rejuvenation through added emphasis. So phrases like 'up above' evolved from Old English ufan (meaning 'up on') to be ufan (meaning 'by up on'), to an bufan (on by on top) through additional steps to above. Thus, 'up above' now translates as 'up on by on up'. Such a linguistic history of expansion and contraction (the latter a common linguistic term) allows us to recognise that *aujourd'hui* means 'on the day of this day,' or in case you're not really sure it means today, *au jour d'aujourd'hui* gives the added emphasis of 'on the day of on the day of this day'!!

Although Deutscher does not examine the work of Barfield or Steiner on the relationship between the evolution of language and the evolution of consciousness, I found many parallel observations. Like Barfield, Deutscher notes that words can completely reverse their meaning: e.g., in the 17th century 'to resent' could either mean to resent or 'to appreciate'. Recently 'wicked' has evolved two quite opposite meanings. On a more fundamental level, I was absolutely fascinated to read that 'to think is to forget a difference'. In other words thought interferes with memory (or our ability to remember everything) by conceptualising every 'different' thing into more generalised categories. I believe Steiner said something similar when he suggested that as long as humans had 'clairvoyant perception of the past, the need for written records did not exist' (original italics in Sheppard 1983). So perhaps we began to write things down (order our thoughts) when our subconscious memories began to fail (and, presumably, when we began to recognise our thoughts and conscious memories as our own). Paradoxically, if I interpret this correctly, this is when self-conscious awareness began to impinge on the instinctual sub- or unconscious: or as Barfield put it when thought (conception) began separating from perception.

Deutscher shows us other linguistic ordering principles such as the 'me first' priority. We tend to describe ourselves first, then others, then animate and inanimate objects (Me Tarzan, you Jane, see animal, by rock). Caesar's principle *vini, vidi, vici* also orders sequences of events in time (though linguists joke that *vidi, vici, vini* describes another type of conquest)! Both examples are intelligible speech, but much simplified, because only 'thing words' and 'action words' are used. Next come prepositions, like 'this' and 'that,' which evolved into pronouns. Ille (Latin for that) more or less evolved to become il (him) and le (the) in French (which just proves that two words can be better than one)! Next consider 'property words' like red or green which derive from thing words (blood and grow respectively) and then become appendages to thing words. But as Deutscher points out thing, action and property words are not synonymous with nouns, verbs and adjectives respectively. The latter are mere syntactic categories. With time, terms (nouns) emerged for abstract concepts (like concept or abstraction) which are not physical things at all. 'Ultimately the distinction between things and actions goes much deeper than language'. (Here I would develop the evolution-of-consciousness implications to infer, following Casserir (1946), that 'language could not begin with any phase of 'noun concepts' or 'verb concepts' but is the very agency that produces the distinction between these forms, that introduces the great spiritual 'crisis' in which the permanent is opposed to the transient, and Being is made the contrary of Becoming'.)

So Deutscher concludes as he began. Language 'must somehow have arisen of its own accord'. Its origins, which make us human, remain a mystery with hidden roots, but living branches. What we do know, however, is that we are currently loosing and average of one language every two weeks, with small preliterate cultures being most susceptible. Alas, at least half the 6000 extant languages may disappear by the end of the century. But even this loss of diversity may be a natural side effect of the pressure for integration and unification that comes from increased contact between cultures and the stabilising longevity-effect of literacy on dominant languages.

Clearly, like cultural change, linguistic evolution is highly dynamic. The implications for the evolution of consciousness are intriguing, and even though Deutscher does not say so explicitly, linguists can and do make very valuable contributions in this area. Although we take our language for granted, it not only reflects our consciousness more than we know, it also allows us to track the history of our conceptual thought and perception. So, we may well wonder: 'Is it something we said?

Fairy Tales & Truth

Graham Dunstan Martin

THE SEEKER'S GUIDE TO HARRY POTTER

Geo Athena Trevarthen (SMN)

O Books, Ropley, Hants, 2008,
262pp.,£11.99 p/b
ISBN 978 1 84694 093 4

Some fundamentalist groups (not exclusively American) regard the Harry Potter books as the work of the Devil. Evidently such people do not recognize the difference between perception and imagination, metaphor and literality, fact and fiction. As J.K.Rowling has pointed out, she does not believe in magic, and fiction has its own different type of relationship to facts. Yet it is just as true as factual report – perhaps often truer, without being literally true.

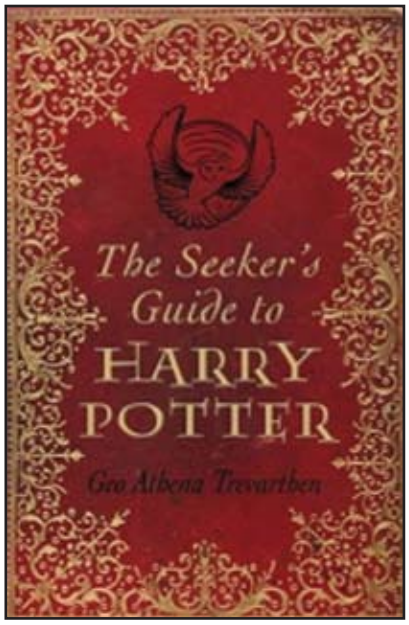
Trevarthen is fully aware of the value of children's fiction. She points to Bettelheim's *Uses of Enchantment*, which argues that fairy tales and myths are health-giving, enabling the child to face its inner terrors. Even (or rather 'above all') in children's fiction, it is necessary that evil is faced. There are at least two errors commonly made by bien-pensant contemporaries: to suppose that (1) children must be weaned away from 'all that fairytale nonsense' with witches and wizards, princes and princesses, and (2) their noses must be immersed in 'real life'. Unfortunately they often suppose that real life is the politically correct. No. The fairy tale is full of the same moral issues as real life: the fantasy only makes these clearer, more acute. When Ralph Fiennes complains that the scene of Voldemort's rebirth shows the savage subordination of a child to an evil older man, and then says, 'that is not children's fare at all' (202), Trevarthen is entitled to disagree. The powerlessness of children, at the mercy of the adult world, is actually a fact. Of course there is plenty of children's literature without darkness in it; but the best such literature does usually have a degree of darkness. There has to be a villain, and a struggle against evil. For growing up means learning to face the world as it really is, not as some bien-pensant sentimentalist would prefer it to be.

JKR's fiction is full of excellent moral lessons. Thus magic is dangerous unless driven by morality. (117) But of course this applies to power of any kind, be it monetary or political – and that is JKR's message. We must grow up, not to suppose that 'we are what we are', for this is to deny free will and personal responsibility, but knowing we must strive to become our desired selves. (207) Conservatives, she tells us, have criticized the books for being 'subversive', 'for encouraging children to break rules'. (156) But as Trevarthen writes, children should learn that not all rules are justified. There has to be a good reason for them. The books are an attack on narrow-mindedness; and Amen to that.

Moreover, in these books, there is a healthy tolerance of ambiguity, in that not everything can confidently be identified as black and white. Thus, one admires the huge skill of Rowling in not revealing the truth about Snape till the very end. Has ever an author so skilfully disguised the thoughts of a fictional character?

I must however disagree with her about accepting death (201-2). As Hans Küng has written, there's nothing wrong with wishing for more life – and therefore for instance wishing for life after death.

Trevarthen takes us therefore on a trip through the intricate labyrinth of Harry Potter's many journeys, identifying the symbols, the mythic imagery, the many traditional images that Rowling draws upon: alchemy, shamanism, the *Bhagavad Gita*, colour-symbolism, Mayan and Celtic mythology, and countless other sources. One becomes aware of just how rich JKR's creation is. There are many secrets hidden in the names of the characters. 'Voldemort' is actually more complicated than she says: the name means Flight (in the sense of 'having wings') of or from Death, or Theft of or from Death, meanings which relate closely to this character's nature and ultimate fate.



At one point she worries that JKR may not have 'intended all the symbolism I'll speak of'. (39) I can reassure her. Do authors know everything that their books mean? Certainly not. Books have the meanings they have, regardless of their authors.

Trevarthen travels on through the book at 100 mph, showering bounteous information all around her as she goes. We never settle down into a really careful study of any of the systems of imagery. However, it is inevitable that a book which studies metaphoric / symbolic thinking should be rather a collection of things than an analysis because this kind of thinking works, not by logic, but by blossoming, burgeoning associations. (It's a pity there isn't an index, for this very reason.) A very lively account of Harry Potter by someone who genuinely understands the importance of children's fiction.

Strategic Presence

Charla Devereux

POWER, FAITH AND FANTASY:

America in the Middle East 1776 to the Present

Michael B. Oren

W. W. Norton and Company, 2008,
791 pp, £24.50 p/b
ISBN 978-0-393-33030-4

This book gives a detailed account of America's 230-year relationship with the Middle East by observing three distinct threads, as the title suggests – power, faith and fantasy. It could hardly be more timely. It is a strange and little understood relationship, with some disturbing and unexpected aspects. The author draws on a remarkable range of government documents, personal correspondence and the observations of many others who have been involved in the relationship, such as merchants, missionaries and general travellers.

Even when still a British colony, America had been involved in trade with the Middle East, being protected by the British fleet. That protection turned to conflict after America issued their Declaration of Independence. Even France, America's Revolutionary ally, did not want to support what they saw as competition. America became

easy prey for the Barbary State pirates. In order to continue trade, a decision had to be made – either spend approximately ten percent of the nation's GDP building up a Naval fleet or resort to bribery. Not wanting to get involved militarily so soon after the Revolutionary War, congress voted against the funding. However, they soon learned that they could not get far on diplomacy alone and so in 1794 Congress granted the funds to create a military fleet capable of winning the Barbary Wars.

After gaining its own independence, a section of Americans felt compelled to spread their form of salvation by bringing enlightenment to those, they felt, who were in need. Oren traces the history of missionary activity and the hardships endured with few converts to show for it all. There was, however, another motive to some of the missionary work – the strong belief in the concept of a Holy Land. Levi Parsons was one of the early preachers who believed that American Christians must strive to restore the Jews to sovereignty in their ancestral and biblical home – Palestine. Parsons and others, transcending all barriers of class, gender and education, believed that it was their destiny to travel to Jerusalem and pave the way for Jews to return to their Biblically promised homeland, accepting Jesus, and thus fulfilling the conditions necessary for the Second Coming and the ushering in of an age of peace and spiritual solidarity. This idea of assisting the Jews in returning to Palestine was not considered to be a radical concept.

In 1844, a New York University professor of Hebrew, the Reverend George Bush, wrote a treatise entitled *The Valley of Vision: the Dry Bones of Israel Revived* in which he called for 'elevating' the Jews "to a rank of honourable repute among the nations of the earth" by re-creating their state in Palestine, thus benefiting all of mankind. (Strange but true, this George Bush actually was a forebear of the two Bush US presidents.)

America also had a mythic and romantic view of the Middle East and although the reality was quite different, as those who travelled there found out for themselves, the myth endured back at home. The notions driving this American approach to the Middle East originated in the Bible. Another widely read book was *A Thousand and One Arabian Nights*, a collection of folktales tracing their roots back to ancient and medieval Arabic, Persian, Indian, Egyptian and Mesopotamian sources. The tales spoke of a tantalising world of hidden treasures, flying carpets, veils, pyramids, oases, and so forth, fuelling the American romanticism with the Middle East.

It is over halfway through the book before Oren gets his teeth substantively into the crucial matter of the foundation of the Israeli state. He chronicles how in November 1918, the same month that the armistice was signed commemorating the symbolic end to WWI, a report was produced by an American secret task force consisting of over one hundred scholars of diverse backgrounds. Unfortunately, none of them were specialists on the Middle East, and so, like the then President, Woodrow Wilson, gained their knowledge of the area from consulting encyclopedias, travel books and missionary manuals but excluding Arabic and Turkish texts. One of the points of the report was that Palestine would be reserved for the Jews.

The peace talks were held in Paris. Wilson, whose life was influenced by having grown up during the post-Civil War in the South and his father being a Presbyterian minister, felt driven by a personal mission to bring democracy and stability to the world. For the Middle East he wanted free and West-leaning nations modelled on America. But he also despised all forms of European imperialism, including that of Britain, and particularly disliked the Turks. So Wilson's thinking was at odds to that of France and Britain who had more imperialistic plans for the region. After much debate the compromise was the setting up of mandates whereby the League of Nations would give control over former enemy territories to various powers whose responsibility was to prepare their given populations for self-rule. Unfortunately no thought at all was given to the feelings of the people of the regions being put under mandate. Wilson, who was reluctant to take military responsibility was also being lobbied by religious and ethnic interest groups from the US, including the Zionists who believed that the number of immigrating Jews would soon represent the majority of Palestine's inhabitants which would fulfil Wilson's own criteria for self-determination. (There were many, including prominent American Jews and some who were formerly in favour of the Jewish state idea, who did not agree with the Zionists.) The control of Palestine, including the promise of support for the establishment of a Jewish national home, was given to Britain. Anxiety amongst the Arabs mounted as a Western-style and largely secular Jewish entity took root in the Islamic heartland with the Arabs wanting their own independence in the area. The British came to realise that the creation of a Jewish National home had a number of complexities. In 1922 Colonial Secretary Winston Churchill recommended the reduction of Jewish immigration into the area. He also assured the Arabs that Britain had no intention of transforming Palestine into a Jewish state. Although the US tried to remain neutral, it eventually got drawn into the situation.

During the 1929 riots in Palestine, eight Americans were killed ushering in new demand for American intervention in Palestine. However, four months after the riots came the stock market crash, which overshadowed events in Palestine. Many Jews were devastated by the crash and became targets of those who felt that they played a part in bringing about the Depression (not dissimilar to some stories doing the rounds today).

In 1936, the arrival of over 150,000 Jewish refugees from Nazi Germany caused another round of violence. British as well as Jews became targets when Arab demands for an end to Jewish immigration and land purchases was ignored. Britain finally issued a White Paper in 1939 virtually eliminating Jewish land purchase in Palestine and limiting Jewish immigration to 75,000 over a five-year period. But it was the invasion of Poland by the Nazis that took the focus away from issues in Palestine leaving many to their own devices. In July 1941, Franklin Roosevelt and Winston Churchill created the Atlantic Charter which protected all peoples from foreign conquest and promised them the right to self-government. Churchill viewed this to be applicable to the occupied states of Europe while Roosevelt insisted that they were applicable to all nations, including those of the Middle East. The next year, a plan was approved by Zionist representatives calling for the creation of a Jewish commonwealth. Zionists continued to lobby the US government for support and by 1945 Roosevelt had become more sympathetic to the Jewish situation with both the Democratic and Republican parties adopting pro-Zionist platforms calling

for Palestine to be opened for the free entry of Jews. America, of course, was also keen to preserve economic and strategic status in the region. Despite a number of meetings between Roosevelt and the Saudi King, Ibn Saud, Roosevelt was forced to promise that he would never assist the Jews at the Arab's expense. In 1945, Vice-President Harry Truman took over the presidency after Roosevelt's death – like Wilson, he too was strongly influenced by his Christian upbringing. The Zionist movement in America continued to gain influence and increase its financial muscle and the Zionist impetus in Palestine became more emergent. In 1946, a Zionist-inspired terrorist gang led by Menachem Begin killed ninety-one people, including seventeen Jews, when it blew up the King David Hotel. As if washing its hands, Herod-like, of trying to manage the increasingly intractable enmity between the Jews and Palestinians, Britain ended up handing its Palestinian Protectorate to the United Nations, which in November 1947 voted to partition Palestine into Jewish and Arab sectors. Fighting between the two sectors raged and many Arabs were forced to leave their homeland ending up in refugee camps in Lebanon, Jordan, Syria and Egyptian run Gaza and the Palestinian territory of the West Bank. Israel was officially recognised as a state on 15th May 1948. An initial desire to create a Jewish homeland within Palestine had morphed into one that sought 'an empowered, sovereign state'. Eleven minutes after its creation, Israel received recognition from the US.

In more recent times, Oren explains, American foreign policy supported Wilson's vision, initially trying to support Middle Eastern states who sought independence so that ultimately there would be a number of independent Muslim states stretching from the Atlantic to the Indian Ocean, all in harmony with America of course. For example, America publicly endorsed Egypt's demand for the complete withdrawal of British forces in 1953. The belief was that once 'freed' countries such as Egypt would willingly join a Middle East Defence Organisation (MEDO), a NATO-like security arrangement for the Middle East proposed by the US. However, the growing threat of the spread of communism changed this policy. When Mohammad Mossadegh deposed the Shah of Persia, seizing control of Iran, severing relations with Britain, and becoming Prime Minister (1951-1953), America became a co-conspirator with Britain helping the Shah regain his throne and placing Mossadegh under house arrest.

Egypt never joined MEDO citing their conflict with Israel as a major obstacle for joining. The overall lukewarm reaction to MEDO by other Arab states soon ended the concept altogether. America did try to mediate a settlement between Israel and Egypt and with the help of Britain in 1954 produced a plan whereby Israel would relinquish territory to Egypt in return for Egypt promising to display non-belligerency toward Israel. Neither side agreed.

It was President John F Kennedy who revived the earlier Puritan concept of America as missionary committed to spread 'American values' throughout the world. This led to a renewed friendship with Egypt. The romance of the Middle East was also revived with the making of the film *Lawrence of Arabia* in 1962. The revival, however, was short lived as a result of a rift between Egypt and Saudi Arabia in which America was forced to take the side of the Saudi's purely to protect American oil interests. Reconciliation with Egypt was now out of the question.

Kennedy focused on the growing Israel/Arab dispute. He was worried about the then secret production of nuclear weapons by Israel and the impact that could have for precipitating an arms race in the Middle East. He despaired of not achieving a breakthrough. After his untimely death (and, basically ever since) more emphasis was put on strengthening the relationship between America and Israel than on any reconciliation between Arabs and Israelis.

The Suez Canal crisis added to the Egypt/Israel problem. The UK, France and Israel colluded to invade Egypt after Egypt denied shipping access to Israel. However, before getting too out of hand, the UN stepped in to keep the peace in the area. This lasted until 1967 when the UN peacekeeping forces were ordered out of the area by Egypt thus provoking what is commonly known as The Six Day War. The war ended with large territorial gains by Israel, much of which is still in dispute today. It also intensified the America/Israel relationship.

This relationship was further indirectly intensified during the Nixon administration. It was not a peace agreement between Arabs and Israel that motivated Nixon, but rather a determination to keep the Soviet Union out of the Middle East. The fact that Israel was ready to assist the US in any way won Israel a closer relationship whereby military aid multiplied many times over and pressure on Israel for territorial concessions ceased. Upheavals in the Middle East continued through both the Nixon and Ford administrations.

Under the Carter administration the policy for the Middle East was focused on a peaceful settlement which included plans for a Palestinian state. Although Anwar Sadat and Menachem Begin held secret talks culminating with Sadat being the first Arab leader to visit Israel, they soon realised that they needed US mediation, and so Carter became the first president since Teddy Roosevelt to get personally involved. But, many of the agreements reached in the Camp David Accords, as a result of Carter summonsing the two leaders to his presidential retreat, were short-lived. The agreements were denounced by most of the Arab world and led to the assassination of Anwar Sadat.

Most of us know the travails and tragedies that have subsequently ensued. As George Santayana accurately and famously said, 'Those who cannot learn from history are doomed to repeat it'.

Michael Oren is a visiting lecturer at both Harvard and Yale universities. He is also a senior fellow at the Shalem Center in Jerusalem, an academic research institute with the purpose of developing ideas to guide Israeli culture in helping to reconcile the tension between the academic left and religious traditionalists. The Shalem Center's Institute for Strategic Studies is dedicated to exploring the regional and global challenges facing Israel and the West. He has produced a remarkable book that pieces together an enormously complex history and that needs to be read by every political leader in the West, not to mention all of us frustrated by the endless failure of attempts to bring peace to the Middle East. It is also of key importance to those who want to understand how religion, through the back-door so to speak, has insinuated itself into the whole geopolitical mess. One hopes that President Obama is a good and thoughtful reader.

Charla Devereux
is Network Manager.