

book reviews

Books in this section can be purchased via the Network web site (www.scimednet.org) from Amazon.co.uk and the Network will receive a 10% commission. In addition, the Network receives a 5% commission on all sales if you log on through our web site!

science-philosophy of science

Plato said God Geometrizes continually - Plutarch

Edi Bilimoria

THE MATHEMATICAL CONNECTION BETWEEN RELIGION AND SCIENCE

Stephen Phillips (SMN)

Anthony Rowe Publishing, 2009, 494 pp., no price on book itself but £33.27 on Amazon - ISBN 9781905200856

Religion is based on dogma and belief, whereas science is based on doubt and questioning. Thus do many scientists opine these days – the likes of the Nobel chemist and devout atheist Harold Kroto, who is deeply suspicious of the Templeton Foundation's sympathies with both science and religion. Stephen Phillips's book, nay, a veritable encyclopædia, proves with chapter and verse that such presumptions are the product of crass ignorance, blind prejudice and appalling arrogance. For the greatest of mystics and religious sages saw no polarized animosity or dichotomy between science and religion. Just one example is the Lebanese poet-mystic Kahlil Gibran, who saw no incompatibility between science and religion, only between science and faith. Equally, such legendary scientists as Newton, Einstein, Schrödinger, Jeans and Eddington – to name a mere handful – intuited the connection between science and religion so eloquently expressed by the Nobel physicist Wolfgang Pauli: 'I consider the embracing of both rational understanding and the mystical experience of unity [Religion with a capital R], to be the mythos of our present day and age.' One cannot embrace without connecting, and that connection is attained through MATHEMATICS – a subject that unfortunately puts off many readers, but this need not be so. For one does not have to be an ace quantum physicist to sense the intrinsic worth of a lucidly presented scientific exposition, any more than one needs to be an academic botanist to appreciate the beauty

and perfume of a rose. Non-scientific readers should bear this in mind. But for a convincing proof of the arguments presented, it is not possible to 'throw the baby out with the bathwater'; a grasp of mathematical physics to, say, university undergraduate level would be a serious asset. The fundamental truths of Nature are reflected in mathematical relationships as affirmed by the likes of Pythagoras and Newton; and in more recent times by James Jeans. And mathematics never tells lies, nor can it be so distorted to misrepresent facts without this becoming apparent to a discerning reader.

The book is profusely illustrated in colour, with an appendix, a bibliography and two indexes, one for subjects and another for significant numbers. But there is no picture of the author and only the barest three-line biodata on him; his website is similarly lacking. There is a message to be gleaned from this. So at this juncture it would not be inappropriate to state that Dr Phillips is an eminent theoretical physicist who graduated from Cambridge. He acquired his M.Sc. from the University of Cape Town, gaining the university's premier research scholarship, and earned his Ph.D. at the University of California, where he also taught mathematics and physics. He has published in several academic and scientific journals, and is also the author of three erudite books on the links between modern particle physics and extrasensory perception. Needless to say, his book shows him to be abreast of the latest developments in quantum physics, relativity and cosmology; add to this the Kabbalah and ESP phenomena (the product of a lifetime's study) and if they were not enough, knowledge about human anatomy, genetics, music theory and theosophy – such breadth of coverage and depth of thought is quite remarkable as the work of a single scholar.

Taking into account the profoundly esoteric and abstract nature of his subject, his style is extremely lucid, but without any rhetoric, and the argument is developed with a magisterial inexorableness rather like the unfolding of a Bach fugue. And like a fugue, there is a principal theme running through the entire densely concentrated work of 494 A4-sized pages: SACRED GEOMETRY – that the underpinnings of the cosmos are based on geometry,

hence on a harmony of number and proportion. Sacred geometries therefore contain scientific information about holistic systems by way of mathematical prescriptions through gematria (assigning a numerical value to a word or phrase) by the ancient Hebrew names of God. Numbers are not merely symbols expressing scientific magnitude but also embody a qualitative aspect of religious and spiritual meaning. Nature ever builds by form and number, as Pythagoras, Plato, Blavatsky and others have taught.

The range of topics covered is vast, as a listing of the contents under the broad headings of philosophy, religion and mysticism, modern physics, music, human anatomy, genetics, divination and their overall interconnections will reveal: *Pythagoras' Life and Philosophy; The Kabbalistic Tree of Life; Superstring & M-theory; Remote Viewing of Subatomic Particles; The Outer & Inner Tree of Life; The Tree of Life Basis of Superstring Theory; The Five Platonic Solids; The Holistic Nature of Music; The Tree of Life Nature of the Human Skeleton; The I Ching as Sacred Geometry; The Sri Yantra; The Polyhedral Tree of Life; The Universal Nature of Sacred Geometries; How Sacred Geometries Encode DNA*; and finally *Conclusion*, which addresses questions and criticisms, makes some predictions, deals with the meeting of science, mysticism and the paranormal, and summarizes the holistic nature of matter.

What have all these subjects to do with the principal theme of Sacred Geometry? The answer is the resounding message so clearly demonstrated in the book: that wholeness is ontological in nature, being the manifestation (or explication) of the wholeness (or implicate order) of Divine Being (Transcendent Consciousness) at the microscopic scale of space-time. So everything in our world bears the holistic impress of its cosmic blueprint or template – the Image of God in Matter, so to say – on the basis of the Hermetic Axiom, 'As is the Inner, so is the Outer; as is the Great so is the Small; as it is Above, so it is Below; there is but One Life and Law ...'. So whether we talk of such disparate things as the five Platonic solids, the biblical Tree of Life, the Hindu Sri Yantra or I Ching, they are all equivalent representations of a universal blueprint; hence they show

detailed correspondences with the sacred geometries of religions whose origins are separated by epochs, and matching maps of all levels of reality, both physical and superphysical. That being the case it would be unrealistic to go into details about all the various correspondences, rather to present some highlights. The chapter on Pythagoras shows why it is that 'the tetractys [or Pythagorean triangle] is the "Rosetta Stone" that enables sacred geometry to be converted into numbers of universal, therefore scientific significance. Sacred geometries are Divine Ideas frozen in space. The tetractys is the key that deciphers their representation into intelligible information about holistic systems,' and, as Blavatsky states, 'it symbolizes both the ideal and the visible universes'. Unsurprisingly, then, it has connections with both Jewish and Hindu mysticism, as later portions of the book demonstrate.

Another fine case in point is the remote viewing of subatomic particles, at intervals over a period of nearly forty years from 1895 to 1933, by two pioneering theosophists, Charles Leadbeater and Annie Besant, using a form of ESP virtually unknown to parapsychologists although long known in India as a yogic siddhi (psychic faculty) having the Sanskrit name of 'anima'. What was observed and meticulously recorded by them in *Occult Chemistry* has demonstrable consistency with the established facts of nuclear physics and with the theories of quarks and superstrings, with the qualification that not all their interpretations can be taken at face value because the very act of clairvoyance disturbed what was observed (faint echoes of the Uncertainty Principle here). Nonetheless this is the only recorded example of a whole series of ESP observations where one can have cast-iron certainty that any charge of fraud or the unconscious use of sensory clues can be demolished *a priori* by the total absence of the scientific information and concepts that they verified, only to be discovered decades later. For example, after the first edition of *Occult Chemistry* in 1908, Rutherford confirmed the nuclear model of the atom two years later; the neon-22 isotope was discovered four years later by Aston's mass spectrograph (clairvoyantly detected in 1908 and referred to as 'meta-neon'); Bohr presented his theory of the hydrogen atom five years later; Chadwick discovered the neutron twenty-four years later; and the first quark model was proposed by Gell-Mann and Zweig fifty-six years later in 1964.

But even more than showing the consistency of Occult Chemistry with the facts of modern science – a feat in itself – Phillips further proves that these

descriptions (to reiterate, provided well over a century ago from the remote viewing of atoms and their constituent particles) confirm the proposition that the tetractys, the Tree of Life and other forms of sacred geometry not only express the multidimensional nature of space-time but also embody the dynamics and structure of superstrings.

For me, the most intriguing and original chapters are those concerning music theory, the human skeleton and DNA, Sri Yantra and the I Ching. Taken as a whole, their overarching message is the unity behind the various mystical traditions of both east and west, and their correspondences with (mapping on to) the human being and matter. Phillips shows the connections and archetypal patterns between the structure and interactions of superstrings, the intervals between the notes of the seven musical scales (used for centuries in church music), the bone structure of the human skeleton, and the codons and anticodons in human RNA that parallel the 64 hexagrams in the Chinese I Ching (regarding which Phillips wisely avoids discussion on its supposed divinatory merits and instead focuses on a demonstration of its correspondence with other holistic systems). All of this is convincing proof that neither matter nor mankind is the product of blind forces of nature or merely random evolutionary adaptations. On the contrary, the visible and subtle counterpart of the human body, down to the minutest speck of matter, are structured according to the cosmic blueprint (prototype) of the 'image of God' referred to in mystical and religious traditions, such as in biblical Genesis 2:27. But the reader should *beware* that this has nothing to do with the naïve and literal notion of 'intelligent design by a creator god' propounded by the Christian creationist-fundamentalists; it is all to do with pointing towards our transcendent origins, our 'image' so-called being the mathematical paradigm that it signifies and is embodied in sacred geometries.

It is worth drawing special attention to the chapters dealing with the human skeleton and DNA. Phillips shows how the Tree of Life represents the 206 bones of the human skeleton, the 'trunk' of the Tree representing the axial skeleton (80 bones of the skull, vertebral column and thoracic cage) and its 'branches' representing the appendicular skeleton (126 bones of pectoral girdles, pelvic girdle and upper and lower extremities). The number of acupuncture points in the human body (the 361 'Classical Points') is also shown to be embodied in the outer form of the Tree of Life. Later on Phillips states that the only plausible reason (disregarding the sceptic's charge of miraculous coincidences) why the morphology of the DNA molecule should

conform to the sacred geometries of the various religions is that this molecule of biological life embodies the very mathematical nature of Divine Mind that these geometries are supposed to represent. This assertion is made on the basis of enormous detail on the nitrogen base triplets in the DNA molecule that encode the amino acids and the sacred geometry of RNA.

In summary, then, Phillips's work has demonstrated with mathematical verification the increasing congruence of modern physics with the mystical insights of the custodians of the perennial wisdom. He has revealed how the true nature of Pythagorean number mysticism provides the key to understanding the process whereby the infinitesimal building blocks of matter conform to the pattern of the cosmic blueprint: the 'image of God'. He has shown the equivalence of the sacred geometries of the mystical traditions of both east and west, and demonstrated how they embody information about holistic systems, be they the nature of music, the human body or DNA. The reason that the sacred geometries within the mystical traditions of world religions are isomorphic is that they were revealed to prepared and deserving human minds through contact with Divine Mind. The considerable persistence and tenacity necessarily demanded of the reader are richly rewarded, each page revealing the author's reverence for, and profound understanding of, his subject. In a recent *SMN* article, Professor Marilyn Monk, UCL Emeritus Professor of Molecular Embryology, observes that most scientific endeavour nowadays 'is piling more facts on an existing pile of facts initiated on some arbitrary basis that could be leading in the wrong direction. Few scientists work on the edge of the known and unknown and very few are seen to be asking questions in the unknown.' For sheer originality of thought and 'asking questions in the unknown', Phillips is poles apart from the herd. It has been an exacting task, but a privilege and a humbling experience, to peruse his magnificent work, which is living testimony to Schiller's renowned saying from *The World of Thinking Beings*, quoted on the epigraph: 'The Universe is a thought of the Deity. Since this ideal thought-form has overflowed into actuality, and the world born thereof has realized the plan of its creator, it is the calling of all thinking beings to rediscover in this existent whole the original design.'

Dr Edi Bilimoria is a consultant engineer, classical pianist and lifelong student of the perennial philosophy.

The Myth of Science

Edward James

THE TYRANNY OF SCIENCE

Paul Feyerabend

Polity, 2011, 153pp., £12.99,
p/b ISBN 978-1-84465-253-2

The Tyranny of Science arose from a series of lectures originally entitled 'What is knowledge? What is science?' that Paul Feyerabend gave to a general audience in Italy during 1992. Paul Feyerabend (1924-94) devoted his whole life to tackling those very same issues. The lectures are a condensed version of the course he continuously redeveloped while teaching at Berkeley and elsewhere from 1958 to 1992.

As ever, Feyerabend does not preach solutions here, but challenges basic preconceptions. He offers new ways of looking at the ethical responsibilities of being a scientist.

I can provide only an outline of his argument here, since our book provides a final non-technical sketch of ideas detailed elsewhere in a lifetime of study and teaching, ranging from basic research in physics to the philosophy of science.

The lectures are reported verbatim in the book, which also records the question and answer sessions after each lecture. Feyerabend, as ever, denies the possibility of any *systematic* presentation and takes the role of a story-teller. I provide a terse overview of this cornucopia of ideas presented in each lecture.

Conflict and Harmony:

Let us consider two world concerns: first, the Big Bang theory; secondly, the present disorder round the world, with terrible events close to bestiality taking place.

How can we make sense of both together?

'Pure' science and everyday life seem unconnected. Currently, science claims openness to discussion and continuous attempts to falsify existing theory: but there is no prize for aesthetic or ethical quality in research: furthermore, inside science, there is no connection between e.g. basic particle theory and economic theory.

What alternative approaches to a world view exist?

■ *Religion*: There is no agreement on principles and no agreed 'way of progress'.

■ *Theory of Art*: There are as many theories as theorists.

■ *Philosophy*: There are different schools, but no agreement since the earliest Greeks.

Feyerabend says that the *possibility* of a coherent account of everything is an illusion.

So disconnectedness is the rule. But is this bad?

Feyerabend provides no systematic argument against the common view of science as the *only* way of having a direct connection with reality. He says that the word 'system' implies removing ideas from the their original environment and arranging them in an artificial pattern which can be taught. But that pattern is simply a *fashion*.

"If you search for *truth*, don't come here", he announces. In fact, *all* scholars tell stories; some are just more complicated than others. The author chooses in this book to illustrate his views by telling the story of philosophy from the earliest times in Greece.

The early Greeks saw a *unity* behind the *variety* of experience, like water behind its appearances as solid, liquid, mist and steam. But science nowadays seems mainly concerned with fitting new discoveries into a pre-existing pattern, a *previous* theory.

The Disunity of Science

Feyerabend quotes *Monod* as disgusted that 'objective truth' (Scientism) has not swept away all other forms of thinking and "has not written an end to the covenant between man and nature". But does Science's "prodigious power of explanation" (he means materialism) make people kinder, more loving, or less selfish?

The naivety of scientists (how things are) when they talk of philosophy (how things come to be) can be clearly demonstrated. You can easily destroy naive materialism with more complex arguments, but you need use only common sense.

However, we can accept useful results from current Science without accepting their views as the only true church. Feyerabend provides detailed examples of Science ultra-simplifying real-world experience to produce theory, and then complexifying the resulting theory to 'explain' the experience when it doesn't fit that existing theory.

But then Science cannot develop in a strictly 'Scientific' manner, for progress implies change; which implies an openness to a new world view; which conflicts with any previously existing

claim of science to be monolithic truth. And a new world view may take a century to provide convincing results and become accepted. Such a 'result' may also be uninteresting to one community, and destructive to another, such as interference with the natural operation of DNA. Furthermore, a new world view may happen to clash with an existing fashion or a temporary enthusiasm, though sadly *never* with the scientific mania for 'rationality'.

Feyerabend says that theoretical scientists judge nature from afar. They claim no need for close observation.

As a result, the monster 'Science' is a cut and paste job constructed by propagandists, reductionists and educators. And commentators pussy-foot round it just as earlier investigators had to pussy-foot round the dictates of the Catholic Church.

Abundance of Nature

The science discussed so far is theoretical, and different from that of practical experimentalists.

Philosophers of Science tend to 'explain' only science theoreticians like the Logical Positivists. In contrast, Feyerabend sees the experimenter as a *rhetorician*, on a separate level from the theorist. The scientific theorist is closer to the philosopher, for no practical experimentation is required by either.

Feyerabend introduces a stronger idea of myth as presently conceived, as a higher theory of how things came to be. All societies have detailed procedures for living, but also foundation myths. These myths are similar in position to abstract mathematical theory among the founders of the Western rationalist tradition.

Has science been successful as a *result* of regular observation and experiment? No; a new principle may be *opposed* to a particular experiment. And many principles have no basis in experience, e.g. laws held to be valid throughout the whole of space time and temperature range. Why? This is the biggest myth of all, with no chance of proof by experience. Does the concept not depend on a overarching power, God or Reality or whatever, as a primal cause?

In earlier times, a local tribe was under the local god, other tribes were under their own gods. The tribes intermingled and the differences among the gods were smoothed out. But a single God can become dominant only by trampling over original differences; e.g. The Indian culture destroyed in North America; or earlier Chinese cultures, more advanced than in the West, which have been ignored.

Feyerabend provides more examples from Greek History; the suppression of individual differences between concepts to form a single

super-concept. This smoothing out is never reached by democratic decision, but through imposition by the strongest group.

Dehumanising Humans

Here Feyerabend summarises the whole argument of the book. The chasm between scientific theorising and ordinary life: on one side, cool abstract judgement, on the other pain and suffering and disaster.

Philosophers of science explain the divide: science deals with facts, life as it actually is. Contrasted with science is Politics, how life should be. You cannot argue logically from facts to what *should be*, so they say we must have separated provinces.

But was this separation the result of 'objective' research? Before Science arose, experience showed no laws. And useful things were made by artisans, not by theorists. So what theory has shown staying power over millennia? Feyerabend cites Christianity, which has continued against all attacks from materialists, and grown in strength.

Feyerabend says he has been telling stories, while others want a 'systematic formal account', using principles and logical processes. But where does that all come from? Why use the latest viewpoint rather than an earlier, why not use a different school of philosophy? Why use experiments we construct today? "Because they are successful". Do the results of scientific experiments bring peace, make us more loving, give us what we *really* want?

Where did the 'laws' which Science uses to produce a problem 'solution' come from? Feyerabend says that there is no single answer to any problem. A study of history does not provide a unique answer, but shows that there have been many answers to a given problem in the past.

So back to Greek philosophy: Originally, philosophers were rich amateurs. Then professionals arose, who showed how to win by cheating and being able to justify it. They built the sciences of *Rhetoric*, how to persuade, and *Logic*, how to convince those who disagreed. They showed that they could find an ingenious logic to justify *any* course of profitable action.

How did the professionals justify their ideas? They used a variety of teaching methods: epic history, lyric poetry, drama, scientific prose. Herodotus used the novel, the short story, one liners, and instructive examples in his histories. Plato rejected all these methods, and used simulated *dialogue* for all difficult problems.

But every original experience consists of much more than can be written. Much more about any subject remains only in the memory of those present. Feyerabend explains: Polyani called it *Tacit Knowledge*, developed

further by Harry Collins[1], who gives an example. The word TREE represents a *concept bag*. A *definition* (a short sequence of words) connects concept bags representing other concepts. This cannot be replaced by something more systematic. All engineers use tacit knowledge, the tools of their trade, which cannot be written down, since their knowledge develops continuously.

Feyerabend says that any 'systematic treatise' is an "exercise in futility". Any new idea is shaped by many factors, it involves tacit knowledge, passions, politics, and public relations skill.

Milieu, Continuing Influence

Tyranny of Science is a final presentation of the ideas of a lifetime. In fact, the most complete and compact summary of Feyerabend's ideas are provided in his much better known *Against Method* [2]. We learn there of Feyerabend's close involvement with Kuhn, Popper and Lakatos, all pioneers in the Philosophy of Science. The latest edition of that book carries a reprint of an introduction for a new Chinese edition, a superb three-page précis of his views, together with an informed introduction by Ian Hacking[3].

Sadly, Feyerabend may be known best for his aphorism "Anything goes", which often taken out of context by detractors. It simply refers to the multitude of different ways that science is undertaken and how scientists work. And it suggests a genuine openness to new ideas, a foundation principle of our Network, which is surely breaking the bonds of the Science Myth right now.

The general thrust of all the foregoing is that Science cannot develop a serious view of the world without taking into account all of previous human thinking and viewpoints other than the traditional 'Scientific' one. Every scientist has a belief system which underlies their statements, it is just not made explicit. And all these underlying preconceptions need to be brought out into the open.

His Continuing Influence

During the reign of the science myth in the public mind over the last 50 years, Feyerabend has been seen as a renegade peculiar. But now there is a growing group of philosophers of science who relate to Feyerabend.

In particular, members of the original 'Stanford School', including Nancy Cartwright[4], John Dupré[5], and Ian Hacking[3], joined in spirit more recently by Ian James Kidd [6] at Durham.

The computer game designer Chris Bateman[7] is becoming involved in this area. This is significant because he could gain the interest of younger people who already know of his work.

We owe continuing gratitude to members Mary Midgley and Rupert Sheldrake for their great hatchet jobs

carried out on various perpetrators of the Science Myth as the *only* true myth.

In my own view, all these considerations cannot be separated off from Theology and from the personal ethical viewpoint which controls how we choose to see the world: but that is for further debate[8,9,10].

References

1. Harry Collins: see <http://press.uchicago.edu/ucp/books/book/chicago/T/bo8461024.html>
2. Paul Feyerabend: *Against Method* Verso 2010 ISBN 13: 978 1 84467 442 8
3. Ian Hacking: see http://en.wikipedia.org/wiki/Ian_Hacking
4. Nancy Cartwright directs the Order project. See: <http://www.lse.ac.uk/CPNSS/projects/orderProject/Publications.aspx>
5. Ian James Kidd: see <http://durham.academia.edu/IanJamesKidd>
6. John Dupré: see <http://www.galilean-library.org/manuscript.php?postid=43815>
7. Chris Bateman: *The Mythology of Evolution* Zero Books 2012 ISBN 978 1 78099 649 3
8. A.N.Whitehead (1925): *Science and the modern world* Simon and Schuster, USA, 1997 ISBN 978 0 684 83639 3
9. Nancy Murphy and George Ellis: *On the Moral Nature of the Universe* Fortress Press 1996 ISBN 978 1 78099
10. Ian James Kidd: *Receptivity to Mystery: Cultivation, Loss and Scientism* See http://www.academia.edu/1831353/Receptivity_to_Mystery

Edward James lectured at Imperial College.

The Cunning Mind

Paul Kienewicz

SCIENCE IN THE TWENTIETH CENTURY AND BEYOND

Jon Agar

Polity Press, 2012, 614 pp., £15.99,
p/b - ISBN 978-0-7456-3470-8

When looking at today's scientific paradigms, one has to wonder why science in the twentieth century developed the way it did, to become primarily reductionist and materialistic. Why did laboratory psychology and behaviouristic psychology dominate university departments and not depth psychology? How did Natural Selection come to be accepted as the dominant evolutionary mechanism while alternative mechanisms such as Lamarckian were rejected? Vitalist hypotheses to explain certain biological processes also fell out of favour. Were they wrong or politically unpopular?

Jon Agar, senior lecturer at UCL, traces the history of twentieth century science, looking carefully at how and why certain developments took place. The book represents a tremendous amount of research and thoughtful analysis. It is largely free of any political agenda, exploring the hidden social forces behind scientific discovery but without placing a value on those influences.

Agar's primary thesis is that "no meaningful science has been generated without a working world origin." By the term "working world" he implies military, commercial, pharmaceutical, philanthropic or political influences that drive scientific research. Rarely do scientific discoveries come as a result of a scientist's idle, disinterested curiosity; more commonly a "working world" is behind them. During the twentieth century science was largely driven by military objectives because of two world wars, the cold war and then the war against terror. The war efforts gave us familiar hardware such as aeroplanes, radar, computers, silicon chips and GPS and the internet. Also less familiar developments resulted including quantum mechanics, nuclear physics, penicillin, artificial fertilizer, pesticides and IQ testing.

Agar criticizes the commonly held view that scientists direct their efforts in response to directives from above. More correctly the relationship between the scientist and the "working world" is a two way street. With few exceptions scientists were in the front line, pushing forward new ideas for military weapons, pressuring politicians to deploy them. During World War II, hundreds of scientists enthusiastically developed Britain's chemical and biological weapons program. The microbiologist Paul Fildes drew up a plan to target three major German cities with anthrax, killing three million civilians, a plan thankfully not carried out for political reasons. He was by no means unique in his zeal to see new, more destructive weapons deployed.

Developments in the fields of genetics, biochemistry and evolutionary biology were also largely driven by political factors. In Russia, geneticists driven by the need to develop science along the lines of dialectical materialism supported materialistic explanations for inheritance rather than vitalist. The early work of Chetverikov and Dobzhansky on the wild populations of *Drosophila* proved pivotal in the "evolutionary synthesis" in the 1940s where genetics, biochemistry and Darwinian evolution came together to create the picture we have today. Only then was Natural Selection accepted as the dominant mechanism of evolution.

No sooner was Mendelian genetics accepted than biologists such as Charles Davenport and Willet Hays

proposed eugenic programmes to improve society's genetic stock. Genetics was seen as a cure for the mentally ill, chronically unemployed, the poor, "weak minded" and criminals. In the United States sterilization laws were introduced in 28 States. By 1939 30,000 people had been sterilized on eugenic grounds, half of them in California. Other countries such as Britain and Germany also had their eugenic programmes. The appeal of eugenics was no doubt the promise of social control by scientific means. The sterilization of the "unfit" was a theme also championed by Julian Huxley in the film, "Heredity in Man." Later, the Nazis were to take eugenics to appalling lows, sterilizing over 400,000 people and euthanising the mentally ill. In this program the medical profession led the charge.

The desire to use science to control people, to shape society and human nature was also why laboratory psychology triumphed over psychoanalytical approaches. Psychologists wanted to construct a science without considering the human being's subjective experiences — a science that treated the human being as an object with measurable quantities such as behaviour.

John Watson, chair of psychology at John Hopkins University, wrote in his 1903 paper, "Psychology as the Behaviourist sees it":

"The time seems to come when psychology must discard all reference to consciousness; when it need no longer delude itself into thinking that it is making mental states the object of observation."

Even so, psychology struggled for a long time before it was accepted as a science. The first breakthrough was the definition of IQ and intelligence testing, applied to the military rank and file to find candidates for promotion. Other applications were in commercial marketing of new products. In all cases, the complex human being was approximated, reduced to measurable quantities. Behaviourism was embraced particularly in the United States because it offered tests useful in schools and asylums, in a country that was growing fast and experiencing urban pressures. Being statistical, it could be applied to masses of people.

The development of psychiatric drugs in the 1960s provided a boon to pharmaceutical companies. They also provided an opportunity to control people. A patient doped up on chlorpromazine would be too indifferent to cause trouble and could be deinstitutionalized. Obviously approaches such as psychoanalysis or other forms of therapy could not compete with the economic and political power of the pharmaceutical industry. The focus on chemical treatment of

psychiatric disorders also explains how the mind (when it was finally recognised) was seen as material, resulting solely from the brain's activity.

The 1960s brought many changes to the sciences as a result of cultural and social upheavals of the times. For the first time the morality of what scientists did was questioned. Previously the application of certain discoveries was questioned but not the science per se. Scientists had led various protests against the use of nuclear weapons; the Russell-Einstein manifesto of 1955 for example. But during the 60s, scientists found themselves on the defensive. The cosy connections between Universities and military laboratories were questioned. In campus protests the value of science was questioned. Many writers recognised that physical, biological and psychological sciences played an undesirable role in undermining religious beliefs and moral codes. The result was not necessarily positive.

The growing distrust of science in the 60s was brought to the fore in the work of Rachel Carson, "Silent Spring". Because she was a biologist, well-connected with oceanographers, ornithologists and other specialists, her work on the harmful effects of DDT carried a great deal of influence. In the battles that followed her book's publication, the layman saw the squabbles between scientists who offered conflicting views, and didn't know who to believe. The commercial interests that supported the use of DDT were out in the open. The effect was overall to increase public scepticism of scientific work, doubt its value — a legacy we see today in the debate over climate change and public scepticism of Darwinian evolution.

Overall Agar makes a persuasive case that the "working world" has been a major driver behind scientific discovery and has given us the technological world we have today, however I question his broad brush stroke. In much of today's astronomy and astrophysics I see very little connection to the "working world". Sure, the Hubble Space Telescope resulted from a close relationship between astronomers and the US Department of Defence. However studies such as cosmology, dark energy or the exploration of extra-solar planets have no foreseeable practical application on Earth. The same can be said of geophysical studies of the Earth's core. Will the discovery of the Higgs Boson lead to any practical application? I'm not holding my breath. A non-trivial amount of science is clearly not done because the results might in any way bring us new technology.

The history of twentieth century science is one of great achievements in the physical, biological and medical areas. Most troubling is that moral

issues as to the value of science, whether science should concern itself with human values, were left on the sidelines. Scientists developed biological weapons and eugenic programmes without any regard to their morality. This begs the question of whether that lack of concern with moral values results from the "working world" agenda. That the working world erases a sense of morality, so that all that matters to the scientist is to serve that working world. In that case should we blame the science per se for our wars? For our planet in crisis? Agar does not raise that particular question, but it certainly needs to be asked.

Paul Kieniewicz holds advanced degrees in astronomy and geophysics, has taught courses in astronomy, geology, philosophy and the Gaia Theory. A specialist in the Earth's gravity and magnetic fields, he has studied the geology of most of the Earth's continents. He lives in Aberdeenshire, Scotland on 3 acres, which he is transforming into a bio-diverse garden. He is the author of **Gaia's Children and Immortality Machine**.

Reconciling Science to God

David Lorimer

EVOLUTION-INVOLUTION P.A. Rees (SMN)

CollaborArt Books, 2013, 427 pp., £17.99 p/b – ISBN 978-0-9575002-0-4

Philippa Rees is a polymath brought up in South Africa who studied literature, science and theology and who has brought these strands together with her own experience in this brilliant epic poem telling the story of the Western Odyssey of the mind with parallel explanations in 150 pages of notes. She has been working on this theory of involution for many years and was in correspondence with Arthur Koestler, Konrad Lorenz and EF Schumacher in the 1970s. The nine Cantos of blank verse – a dialogue between Reason and Soul reminiscent of Iain

McGilchrist's The Master and His Emissary – chart our cosmic journey, ending up, like Anne Baring's Dream of the Cosmos and Richard Tarnas' The Passion of the Western Mind, with a phase of love and reunion in which we come full circle.

The introduction explains the thesis of the book and the meaning of involution in this context. It is related to collective memory through acts of consciousness, recovering and transcending what has gone before. Genius plays the role of being an advanced emissary of consciousness enabling others to follow in their understanding. Philippa's understanding of the basic impetus of evolution is not as accidental mutation but rather 'behaviour or act as the critical driver of change.' This is elaborated in the series of six propositions:

- Interaction leads to inter-iorisation
- Internal selection increasingly overrides natural selection - mind is the driver of change
- Interactions between organisms and environment are retained as memory - the development of mind leads to autonomy
- Matter is in'formed' by mind through memory
- Memory of evolution is stored
- Involution in man occurs through the recovery of memory - we have the entire memory of our evolutionary path and understand its connection with everything else. Consciousness is able to return to its origins and recover a lost sense of wholeness.

The theory has parallels with the work of Teilhard de Chardin, Ervin Laszlo, David Bohm, Carl Jung and Rupert Sheldrake, all of whom have found their own ways of reconciling the scientific with the spiritual. Many readers would agree that we are paying a 'high price for science's limited certainties' by excluding subjective experience in terms of revelation, inspiration and intuition. Philippa's approach opens up access to these realms, all the more so through the use of poetry as her medium and a counterbalance to the dominance of the left hemisphere not only in science, also in academia in general. As she points out, the metaphorical language of poetry is able to address the implicit

and paradoxical and express involution as mystical science. This is scientia in its broader form as acknowledged by the perennial philosophy. Some thinkers like Parmenides (as explained by Peter Kingsley) and Wittgenstein have realised this - philosophy is essentially intuited rather than deduced.

The dialogue between Reason and Soul is sometimes tense, sometimes creative. Reason is always wanting to cut

to the chase in a literal fashion, while Soul is more expansive and imaginative. Reason refers disdainfully to 'a spoonful of soft syllables to help all sophistry slip down' and is a little impatient with the paradoxes of quantum mechanics. Soul reminds the reader that:

'The world is all en-folded mind.

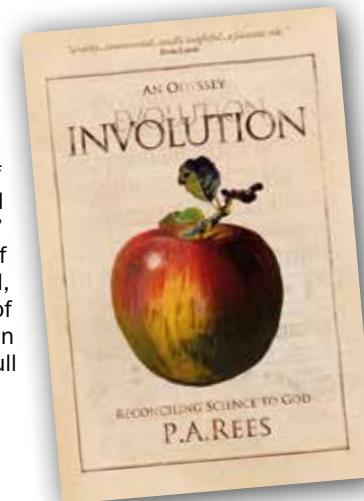
The yeast of any forward thinker

Leavens the whole loaf entire.'

The reader is able to consult the footnotes on the way through and alternate between the mode of poetic narrative and more detailed background explanation, which demonstrates the author's considerable erudition. Perhaps the best way is to read through a canto and then reread it looking up the references so that the narrative is not interrupted all the time. The reader passes through the early states of unity - what Barfield called original participation - through the genesis of tools and language, the world of the Greeks, Archimedes and Alexandria, the dark ages and the preservation of culture through monasteries and Muslim thought, the Renaissance (especially art) then the Enlightenment and rationality leading onto Modernism and dissolution before finally arriving at love and reunion, Barfield's final participation where Reason falls silent and Soul continues the narrative.

Following on is an appendix discussing the relationship between mysticism and science and drawing on William James, among others, but also mystics from different cultures, those who have experienced a more ultimate state than reason can attain. This is the work of the intellect, properly speaking, our capacity to apprehend unity, as also explained in my review of sacred psychology below. Some mathematicians like Poincaré and Penrose have followed in the footsteps of Plato and understand harmony in a deeper way. In an Afterword, Reason and Soul explore the author's experiences leading to her thesis – 'the brain is the soul's receiver.' I should also mention that there are informative charts at the end of each set of canto as a way of conveying information in a different mode.

I know of no comparable work covering the Western Odyssey in its many thematic variations and using an interplay of poetry and prose to convey the adventure of the journey and arrive at a more comprehensive understanding of reality as a whole. The author's grasp of the principal elements of Western culture is masterly and her poetic narrative is woven together with extraordinary subtlety and eloquence. The result is a heroic tour de force that deserves the widest readership.



medicine-health

Uniquely Precious Lessons from Autistic Fellow Travellers

Larry Culliford

AUTISM AND SPIRITUALITY - Psyche, Self and Spirit in the People on the Autism Spectrum

Olga Bogdashina

Jessica Kingsley, 2013, 272 pp., £19.99, p/b - ISBN 978-1-84905-285-6

There are two kinds of knowledge. Science is material knowledge, about the world and the universe. Wisdom is sacred knowledge, about who we truly are, and about how to be and behave for the best. Learning – and teaching each other – how to grow in wisdom, I want to suggest, is a vital aspect of all vocational endeavours. There is more to exemplary medical and nursing practice, for example, than simply gaining scientific knowledge and accomplishment.

When, many years ago, I was training to become a psychiatrist, a wise man (who happened to be a Buddhist monk) gave me some good advice. A few of my patients were causing me concern because their illnesses had not responded to prolonged and extensive treatment. They were simply given accommodation within the mental hospital, where they stayed indefinitely for their own protection and for the safety of others.

I found the plight of one man particularly distressing. Often tearful and crying for help, he seemed to be in almost perpetual torment. When I spoke of him, the monk helped me see that the pain I first had to deal with was my own. He explained that the reason for my discomfort was that I cared. Compassion is innate, he said. It may be dulled. We can try to ignore it, but we have no powers to switch it off altogether.

Compassion means ‘suffering with’ people; so it must hurt if it is to be genuine. Questioning what could be done in this situation, I was told that, instead of thinking we must always help by giving something, a remedy of some kind, it is better on occasion to think of taking something too, in the sense of letting the person inform you about yourself... About your compassion and the accompanying distress, and about your need to learn how better to manage it. In other words, the wise man said, “*You must let your patients, and those you encounter who suffer, from time to time be your teachers*”.

And that is what Olga Bogdashina is also saying to us in this remarkable book. In order to write it, fully cognisant

of all the relevant literature on autism, she has similarly let her patients (and her own autistic child) be her principal teachers. Her message is that autistic people experience the world in a way that serves well to remind us of the importance of an often disregarded spiritual dimension in our lives.

She writes, “Spirituality plays a significant role in the lives of many autistic individuals and their families. . . (It) can be a powerful element that will help autistic individuals and their families to overcome their difficulties and find meaning in their lives”.

Part of her explanation is that, “What can be detected by some autistic people would not necessarily be noticed by the majority. . . Some autistic individuals’ senses are very acute”. While admitting that not every person with autism displays this degree of hyper-awareness, Bogdashina reports, “What makes autistic individuals more open to spiritual experiences is their sensitivities: sensory, emotional, cognitive and spiritual – all caused by fundamental differences in their neurobiological development”.

We are told that, most of the time, so-called ‘normal’ people know only what comes into their reduced awareness (which is further consecrated as genuinely real by concepts and language). In autism, contrariwise, there are no sieves or filters to stop the flooding of information, which then seems to accumulate in a kind of ‘preconscious system’. Taking in information with the conscious ego-self ‘absent’ from the process, and storing it in a pre-conscious reservoir, they sometimes surprise not only those around them, but themselves too, by expressing knowledge they never thought they had. It has the quality of ‘unknown knowing’, and so is comparable to fruits of the contemplative methodology of many mystical traditions, and the practice in particular of meditation, aimed at the acquisition of wisdom.

Comparing people on the autistic spectrum with children (and even animals), Olga Bogdashina tells us, “(They) often perceive spiritual experiences only because they haven’t yet been conditioned *not to*”; helpfully adding, “The person with autism may simply not be fully cognizant of her very special gift, and may assume *everyone* communicates this way”.

Pioneers like William James, Pierre Teilhard de Chardin, Carl Jung, Aldous Huxley and Evelyn Underhill; and more recent authorities like James Fowler, David Fontana, John Swinton and Victor Schermer; have all pointed towards a new paradigm for psychology that insists on the inclusion of a spiritual dimension if it is to make sense. Organizations like the Spirituality and Psychiatry ‘Special Interest Group’ of the Royal College of Psychiatrists, and the British

Association for the Study of Spirituality (BASS), have been taking this paradigm forward, beginning not simply to make it work, but to render it increasingly indispensable.

A renewed emphasis is involved on the basic human capacity for what may be called ‘spiritual awareness’, a faculty common in childhood that does not depend on any type of religious instruction, practices or beliefs. This bold new paradigm depends rather on a kind of holistic vision, one that comprehensively unmasks the illusion of so-called ‘objectivity’ on which the earlier, scientific paradigm has been constructed.

Objectivity works well for investigating the physical and biological dimensions, but has only partial value where psychology and the social sciences are concerned. It now becomes necessary for people to engage themselves fully – therefore subjectively too – in the processes of discovery. Those who see this, and choose to explore further, soon discover the need to *do the experiment* for themselves, to examine their own personal spirituality and recognize it as involving a kind of journey – sometimes difficult – towards greater maturity and wisdom, opening themselves up, perhaps painfully, to the innate wealth of their compassion.

As dormant powers of spiritual awareness are awakened and kindled, part of that journey will involve the discovery of something greater than ourselves that touches us deeply within, becoming a trusted and valued source of guidance, inner strength, courage and hope, especially in times of adversity.

For people on this journey (and ultimately, of course, this means everyone), autistic people, in contrast to being seen as disabled and burdensome, can be seen rather as offering unique, rare and special learning experiences, not only about themselves and how best to get along with them, but also about ourselves, about aspects of our truer, deeper natures that we may well – individually and collectively – have been neglecting.

Page by page, chapter by chapter, Olga Bogdashina shows us what precious fellow travellers on life’s often difficult and perplexing but ultimately rewarding journey people with autism may be. We are truly wise to take them as our teachers.

There are two kinds of knowledge, science and wisdom. This book offers an exemplary synthesis of them both. Giving thanks to the author, I recommend engaging with her gift to us in these pages without delay and as fully as you know how.

Dr Larry Culliford is author of ***The Psychology of Spirituality: An Introduction***.

From Mental Illness to Insight

Janine Edge

THE GIFT OF ALZHEIMER’S – Heart and Soul Journey

Maggie La Tourelle (SMN)

Available on Amazon, 2013, 272 pp., £12.99, h/b - ISBN: 978-0-9575552-0-4

It may be hard to imagine how a conversation with a person suffering from Alzheimer’s could become an utterly absorbing read. Yet this is the result of this highly unusual book by Maggie La Tourelle about the relationship with her mother in the last four years of her life.

The book starts with the move of the author’s mother to a care home and a frank account of her close family members so that we have a context for understanding what follows. The main part of the book is referred to as the ‘Heart and Soul Journey’ and consists of edited conversations which took place between the author and her mother together with a personal commentary by the author. The last chapter contains the author’s reflections relevant to us all, as well as inspiring guidelines for carers and therapists who are looking after those with Alzheimer’s.

What the author discovers is that the degeneration of her mother’s brain results in dissolution of self, past and present, so there is only now. It is this which the author believes enabled her mother to access other levels of consciousness, referred to in the book as ‘the Other World’. Her mother’s state also allows for complete honesty in the moment about what she is experiencing, helped by the unconditional loving presence of the author who is able to hear what her mother is saying as meaningful.

The result, on one level, is the author experiences the new psychic abilities of her mother, including telepathy and precognition. On another level, the new state of consciousness of the mother allows for healing to take place for herself in respect of her past and in respect of other members of the family, including the author herself and her deceased sister. And on yet another level, the mother is able to gain insight into the process of dying, both in this world and the Other World, with the result being a profound absence of fear of death. All this is revealed in the staggeringly honest, emotional and intimate exchanges between mother and daughter.



There are two observations I would make about the book which I think are relevant to potential readers. The first is that, after quoting what her mother says, the author often describes in some detail what she feels her mother really means, together with her own reactions and interpretations. In this way, the approach of the author is heuristic (although the book does not pretend to be academic qualitative research.)

Some readers might feel they want to challenge interpretations reached by the author, but to engage with the book in this way would, in my view, be missing the point. The author conveys over and over again her authentic and fully disclosed perspective and, like all heuristic accounts, going with the author on her subjective journey is what enables our own eyes to be opened by it, even if it does not reflect our personal world view.

The second observation is that the author only includes in the book those parts of the conversations with her mother which she considered contained wisdom and insight. In the last chapter the author says she could, therefore, be said to have ‘romanticised’ the reality of the Alzheimer’s condition. The author also acknowledges that the experience of others caring for those with Alzheimer’s might be that of relentless negativity, through no lack of love on the part of the carers. I would say rather that the orientation of this book is to focus on the upside aspects of Alzheimer’s, as its very title conveys. I would still urge those caring for a person with Alzheimer’s to read this book even if their experience is very different for the author’s. As the author says, it is very easy for carers to project their own suffering about the situation onto their loved ones, and this book beautifully models how to free oneself from this projection and engage in a more positive way. Further recent scientific research on the effect of Alzheimer’s on the brain, referred to in the last chapter of the book, shows why some of the experiences of the author should not be unique.

This book is by no means just for those people caring for those with Alzheimer’s or those who have an interest in the dying process. I have already made good use of some of the principles articulated in the last chapter in my encounters with people who are alive and well. Most important of all, this book should be read as a testament to the power of love in overcoming disease and dysfunction.

Janine Edge is a mediator and Chairman of the Scientific and Medical Network Charitable Trust.

Reforming the Culture of Healthcare

Margaret Hannah

INTELLIGENT KINDNESS: John Ballatt and Penelope Campling

Royal College of General Practitioners, 2011, £25, h/b - ISBN: 978 1 908 020 04 8

In a profound, timely and nuanced book, Ballatt and Campling delve into the human dynamics, which lie at the heart of effective healthcare. They begin by describing the roots of the word kindness, which is linked to the words “kin” and “kinship” reflecting both a sense of obligation towards others and the actions and feelings, which derive from that sense of connectedness with our fellow human beings. Kindness lies at the heart of the therapeutic alliance – the essential basis of effective healthcare, mobilising patients’ inner resources in their recovery from illness. But being kind carries risk - maybe getting things wrong or getting hurt in the process. It also takes courage, to overcome self-interest, anxiety and conflict. Kindness takes a certain intelligence to be useful and wise. It is both natural and necessary for effective healthcare and yet, as the authors go on to explain, there are many reasons why it has been marginalised and corrupted in the 21st century NHS.

Written by two people with extensive clinical and managerial experience in the NHS, the book contains timely reminders of recent tragedies. They quote from the first Francis report on Mid-Staffordshire NHS Trust, which described abject levels of care and abuse of patients. The authors apply a psychodynamic lens to the question of why people stopped being kind and started to abuse. They point out that frontline staff day in and day out face the experience of “ill-being” in their patients. Given this experience of “ill-being” is a complex state of unease with themselves and their environment, it is an uncomfortable place for staff to inhabit without space and time to process the difficult feelings that can be evoked. As a result, emotional defences build-up, burying feelings of vulnerability and sadness and diminishing the capacity for kindness. On top of this, treating people who are ill is inherently uncertain. We don’t know beforehand, who will get better and who won’t, who will live or die. Facing this on a daily basis can make it difficult to distinguish between a treatment, which simply didn’t work and feeling oneself to be a failure. This can engender a sense of helplessness, leading to self-blame, and guilt, which in turn can lead to anger, dislike and even hatred for a person or people that provoked such feelings.

These are difficult areas to explore, when staff are so stretched, with little time for reflection. The book offers some very useful ways in which this can be addressed, with an emphasis on “good enough” care based on the ideas of Winnicott, mindfulness training, supervision and support for staff. One of the ways of achieving this is by rebalancing the effort of quality assurance from outside inspection towards more autonomy for staff but with transparent accountability to the patient. Too much threat in a system fatally undermines the capacity for kindness. Rather than think the way to achieve high quality care is through cajoling and chasing poor practice, the emphasis should shift to supporting and enabling staff to do what they would want to do in most cases – provide great care.

This book is not just about understanding individual staff behaviours and how they might be supported to work with attentive care, but also explores these human dynamics at every level – in teams, services, organisations and government. In the last third of the book, the authors make a devastating critique of the incessant change processes, which have be-devilled the English NHS in the last two decades. They show how these destructive reforms reflect a failure of political and NHS leaders to contain their own anxieties, creating fragmentation and alienation in the health service and staff who are disorientated and distracted from their core task of caring. The insights from Intelligent Kindness point to a new political economy of health. Rather than evading crucial political, moral and ethical judgments through the use of spurious economic calculations, the authors suggest engaging with the messy complexity of reform as a human process.

It is refreshing to read a book, which presents the current crisis in the NHS not as a technical challenge, but a human one. Whilst sketchy in terms of how to bring it about, it is clear that the quality of services rely less on economics and technology and far more on people and how they create a positive therapeutic environment. Healthcare needs to move on from its technical, industrially-inspired mindset, recognising the work as a psycho-social process, involving human relationships emotion and the capacity to think about and care for others. This is not going to be achieved through external reform, but inner change in those of us working in health services, recognising ourselves as participants in a creative, courageous, human and kindly endeavour.

Dr Margaret Hannah is a consultant in public health in Fife and a member of the International Futures Forum.

Health, Creativity and Fertility for the Soul

Annie Davison

THE HEALING POWER OF THE SACRED WOMAN

Christine R. Page M.D.

Bear & Company, 2013, 384 pp., £16.99, p/b - ISBN 978-159143144-2



The violations of sacred womanhood, says Dr Christine Page, go back more than 3,000 years, to the time when sexuality and spirituality became separated and a woman's naked body, especially her genital organs, came to represent a dirty and evil force. This disconnection from sacred sexuality and sacred femininity can be seen in the prevalence of sexual violence, pornography, rape, abuse against woman, not to mention the abuse of Mother Earth in the world's cultures today.

By anyone's standards Dr Page is a remarkable woman. As a young child she was in constant communication with spiritual beings whose wisdom and knowledge she has learned to trust over the years. She trained as a medical doctor and worked in both allopathic and complementary fields for almost twenty years, but gave up medicine when she realised she had lost touch with her spiritual foundations. Now known as a mystical physician, she is an international seminar leader on healing and empowerment.

In her attempt to 'lift the veil that shrouds the sacred purpose of womanhood', this deep, affecting and healing book is made even stronger by including us in her own story. Diagnosed with breast cancer she realised that in her desire to fit in and be accepted she had become disconnected from her own true feelings and 'fallen out of love with herself'. "I seemed to have joined the ranks of all the 'nice' people who get cancer".

But instead of devastating her, 'the turmoil released untapped sources of assertiveness and inner strength'. Illness, she says, is highly influenced by the perceptions and beliefs we hold about ourselves. In *Listening to the Wisdom of the Body*, she suggests – through the work of Dr Bruce Lipton

- that inherited patterns of familial behaviour have the potential to manifest as physical disease – unless we decide to literally and figuratively change our minds!

Dr Page hypothesises that the patriarchy subdued the feminine because they knew women possessed powers far more potent than physical strength and the accumulation of financial wealth. And over time women have denied their own inner urges and inner feminine guidance - often, as she did, to succeed in a man's world.

This conditioning and programming of the female psyche continued over many generations and it is inevitable that the distortion of the truth will eventually present itself in physical illness; particularly in the breasts and fertility organs. The physical body acts as the soul's most perfect messenger; the body never gets the message wrong. Cancer she says, like all life-changing experiences, gives us the opportunity to stop and ask 'where am I not being true to myself'.

In *Meeting Our Ancestral Grandmothers*, she tells us that in prehistoric times women were seen as living representatives of the Great Mother, whose cyclical and potent energy gave birth to all existence. The feminine was seen as having not only the power to give life but also the ability to intercede with the supernatural world.

Symbolically this continuous flow between the worlds of life and death is expressed through the menstrual cycle with the blood of menses being seen a mystically endowed with the power of purification and death as well as rebirth and renewal.

A woman's power stems from deep within her being and once she connects to this core strength nothing can stop her achieving her destiny. She asks each woman to fall in love with the shape of her own unique body, with each precious organ and cells, which holds the memory of what it is to be a sacred woman.

Sex is a sacred and healing act. Through the medium of the *Dragon Queen* Dr Page travels intimately through the process of a woman's sexual arousal, exploring how each aspect prepares a woman to receive healing energy and inspiration, which ultimately affects the fertility and evolution of the consciousness of this planet.

Sex is a process of evolution and creativity that comes from our deep and eternal connection to Source whether it is called god or the Great Mother. Sexual arousal in a woman causes her magnetic body to light up, allowing her to raise her consciousness to the crown chakra as well as providing her partner with 'a transformational pathway that leads to transcendence and healing'. This is information we should all know – now.

Through the *Mother Cow* she explains the mysteries of the sacred breast, surrounding the heart chakra and symbolising the power of unconditional love. A woman's breasts, she says, are the intermediary between the earthly world of the *Dragon Queen* and the spiritual world of the magnificent *Queen Bee*, who we experience through the crown chakra and the all-important pineal gland.

As she tells us from her own inspiration, received from the archetypal consciousness of the Great Mother, the *Queen Bee* 'holds the door open to the Great Mother's void or primordial waters of no-thingness'.

The message of Christine Page's book - which includes personal stories and healing rituals as well as in-depth historical and archaeological research - is clear and authoritative. "When a culture decides to disregard or disconnect from the feminine, productivity cannot be sustained, economies become depressed, infertility levels increase and the land becomes barren and dry".

We have reached a tipping point in the world today. Unless there is a rebalancing of the masculine and feminine energies our cultures and civilizations will also be drastically reduced or will die out. She calls on every single woman to begin to honour and respect her essential and sacred purpose here on earth, which goes far, far beyond mere procreation.

Annie Davison author of *The Wise Virgin* and currently *Time to Change: a guide to life after greed*.

philosophy-religion

Making a Better World

Martin Lockley

CARETAKERS OF THE COSMOS

Gary Lachman

Floris Books 2013, p/b, £16.99, \$29.95 ISBN: 978-178250-002-5

Do you have doubts about humanity or worry the world is in a mess? Do you fear that human nature dooms us to walk the road to ruin? If so, take heart and read *Caretakers of the Cosmos* where Gary Lachman, (see *Network* 104), points out that such human doubts are a type of collective, post-modern lack of self-esteem, born of a fear of appearing self serving or arrogant. Our species, therefore, suffers from the so-called "the fallacy of insignificance," a type of nihilism and *ennui*. This "false humility" misrepresents our historic blunders and failures as a failure of our ability to live harmoniously with nature

and among ourselves. This in turn leads us to a "failure to succeed" in what we need to do, which is to make a better world and be caretakers of the cosmos. While one may balk at the notion that we are a special or exceptional species with dominion over nature, most of our cultural traditions recognize that we are unique, and if not created in the image of God, at least uniquely able to conceptualize God and "reflect" on our self-consciousness and linguistic and creative abilities. These in turn led to our "fall" into self awareness and our separation from unconscious nature. If cosmic evolution bequeathed us these gifts, including our ability to recognize the Anthropic Principle, holding that all evolved to make intelligent consciousness possible, surely we should recognize these gifts and act accordingly. This means that it was just as natural for us to evolve out of nature's warm cocoon of unconsciousness as it is for the babe to be born abruptly into a sometimes dangerous world. This means, therefore, that we should recognize the caretaker responsibility that comes with human consciousness, and recognize that doubting our ability to do so is pessimistic and lazy, a failure to rise to the challenge of making the world a better place.

For Network readers, although the book follows many familiar paths and thinkers who eschew scientism and reductionism, I found Lachman's user friendly treatment refreshing. Although the caretaker theme is common in enlightened circles such comprehensive expositions in this type of evolutionary context are rarer. Lachman's depth of reading and research are admirable, and he weaves the story well, developing what is becoming increasingly obvious – that all of human history reflects the evolution of consciousness. Specifically, as we only separated conceptually from nature recently, so we are only just now beginning to recognize our evolutionary relationship to the biosphere, and cosmos. Incidentally, *cosmos* is not the same as the physical universe, rather it also reflects the qualities of the good and beautiful we recognize. Given our human ability to reflect on evolution it is but a small step to realize that evolution has become a conscious process. Julian Huxley said this explicitly in 1957. More fundamentally, not that Huxley's point is not paradigm-shifting, our perceptions and consciousness define the limits of what we see, and thus the limits of what we define as the world. This in turn means that the world (our world view) changes as we evolve, and that we are a participating organ in the process and not detached objective observers. If this sounds familiar, it is. Thinkers from Owen Barfield to quantum physicists have pointed this out, and warn of the fallacy of a scientific philosophy that thinks otherwise. The

fallacy of thinking ourselves objective leads to the view that the universe is merely a physical cosmos, and that consciousness is essentially a meaningless epiphenomenon arising as the by-product of matter (neural tissue), rather than the primary datum, or what a fair number of visionary scientists (usually "cosmologists") refer to as the "mind of God." [While it may be true that until humans became self conscious, we did not "tune in" to this particular consciousness frequency, that does not mean that other states or levels of consciousness did not exist in actuality or potentially as part of the dynamic fabric of universal, cosmic or integral consciousness – what Gebser called the wellspring or "ever present origin." After all, our ancestors evolved into the physical world, to see, hear and smell before they developed the senses to experience them fully and experience them as meaningful, in the way we might appreciate them. *Ergo*, the ability to appreciate new dimensions of consciousness and experience new world views, is a part of a co-evolutionary or participatory process, made conscious in this and other, like statements].

Because of our self consciousness we are dwellers in two worlds, as many a metaphor will confirm, one apparently more tangible and visible than the other. Perhaps as a direct result our world views are equally divided between faith in the tangible-visible and the intangible-invisible. When the tangible world becomes mundane to our sensibilities, it is a sign we have "fallen" and lost our connection. We become homesick for that other world that seems full of the promise of spiritual fulfillment and a relationship with the divine. As mystical experiences inform us such re-connecting (*religiere*) is participatory. In as much as God saves us, we save God by transmuting matter into spirit. Here it seems, at least in our present stage of evolution, lies all that is meaningful and good in existence, and its seems, to quote Van Dusen, good "has a general impulse towards existence." This theme or at least that of positive value and purpose was recently expounded by Steve McIntosh in *Evolution's Purpose* (Network 109). Failure to recognize this impulse is tantamount to failure to recognize our human worth. Max Scheler's hierarchy of values informs us that we indeed veer inexorably in value enhancing directions, and that our impulses towards altruism are not simply because we have selfish genes. We have what George Steiner calls a "speculative lust" for the "drug of truth." [I proffer the suggestion that just as the Schelerian hierarchy of needs develops, in individual ontogeny, through sensual, vital, intellectual/spiritual and sacred, so such progression has necessarily played out in human history or

phylogeny, leading, at times slowly!, to enhanced cultural values]. Lachman makes the excellent point that serious thinkers have repeatedly come to similar conclusions. Such perennial, internal consistency in expositions on human nature seems to argue in favor of their reality.

So, evolution has created a human consciousness capable of asking the caretaker question. This does not give us dominion over nature as an earlier consciousness suggested, but rather reminds us of our responsibility. Many current efforts to make a better world prove this impulse to be true. Excessive hunting preceded the conservation and ecological movements, and as Rudolph Steiner suggested, it is only human consciousness that recognizes, and then solves “problems.” Lachman suggests that the poet Rilke may have a hit on the crux of the caretaker problem in modern times. Again, it is the perennial problem of our separation from the world, our creation of “pseudo things” with which we cannot resonate. Thus we fail to appreciate real things, or make them the beloved furnishings of our interior world through Herzwerk (heart work). This is again a means of transmuting matter into spirit, producing new vibration spheres in the universe – new spiritual intensities, new consciousness structures, perhaps even a new species. This, it seems, gives new and vital meaning to creativity, conscious evolution and participation: and thanks to Lachman and Rilke for expressing it so vividly. The skeptic may scoff at the invisible-intangible. But a black hole is also invisible and out of it a new universe is born as a white gusher. This too is transformation and that is the name of the evolutionary game, so much on everyone’s lips these days. Evolution is so dynamic that I willingly side with those who believe in a creative evolution, where, the as-yet-little-understood dynamics of intentionality and negentropy, trump the destructive forces of entropy and heat death. Death, a necessary corollary of life, is for many not the end, but what Teilhard called a “change of state,” a transformative process.

Lachman ends with Scheler’s idea that God is not just an omniscient, mind, a disembodied good idea, but rather a vulnerable and weak entity. This is surely so if we are created in his/her image. He/she had to enter the chaotic, messy, tangled jungle of matter in order to complete him/herself, just as any artist must grapple with matter in transforming an idea into a creation. It is part of human destiny to be a spiritual being and ask about our place in the universe and, of late, our caretaker role. Moreover, spirit is never an object or “thing” but always a personified “I” and as such we instinctively know we should recognize

the spirit in others, not just in humans and sentient animals but in all creation. It is this integration of spirit and matter that will make us mature citizens and caretakers of the cosmos. But first we must get beyond the “fallacy of insignificance” and know ourselves and our spiritual worth.

Martin Lockley is Emeritus Professor of Palaentology at the University of Colorado, Denver and author of **How Humanity Came into Being**.

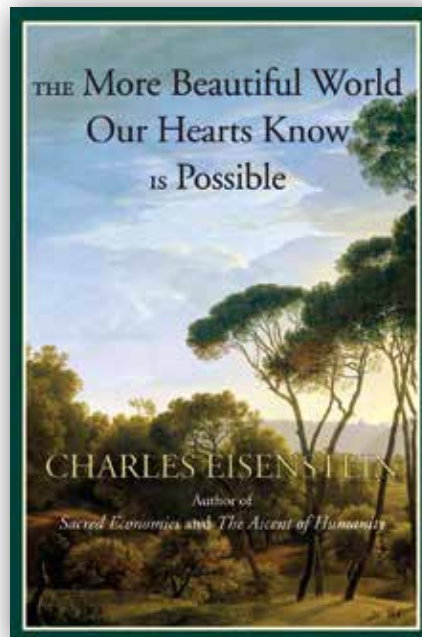
Living the Story of a Beautiful World

Rupert Crisswell

THE MORE BEAUTIFUL WORLD OUR HEARTS KNOW IS POSSIBLE

Charles Eisenstein

North Atlantic Books, 2013, 272 pp., \$19.95, p/b – ISBN 978-1-58394-724-1



Meeting Charles Eisenstein over dinner on a winter’s evening in Scotland, I was left with the impression of a man who has stepped into the wellspring of his message and whose gift is to share that story with us. He is aware, though, that the significance of sharing is more in the enjoyment of giving than in the gift itself. In person, as on the page, it is the buoyancy, the optimism of this awareness that makes his a vital voice in a zeitgeist chorus of brittle denial or apocalyptic doom.

His message is a simple one: we are living in the exhausted denouement of the story of separation and ‘we need to enter a fundamentally different story’, the story of interbeing. His

point is, that it is for us to remember our heritage as story-tellers, that the power of our own song is the gift, the sharing of which is the warp and weft the new story.

As such, then, this is not a new story at all, but an age old perennial tale and the more I read, the more I felt that The More Beautiful World Our Hearts Know is Possible is a Bhagavad Gita for our time. It is rare not to hear a note of despair in the voices of people who see themselves aligned against a mighty army of exploitative corporations, banks, and the governments and ideologies that facilitate them, but Eisenstein’s advice is the same as that of Krishna’s to the faltering Arjuna: act but do not be attached to the fruit of your actions and make each act a gift from the heart wherever you are and whomever you meet.

Eisenstein counters criticism of his naivety through explaining that naivety is the fertile ground in which the miraculous seeds of the new story can flourish. He recounts anecdotes of Occupy protesters responding to police brutality and pepper spray with smiles and invitations to dinner, of an unassuming shrimp boat operator preventing a multinational chemical company from building the complex which she feared would pollute the Gulf coast where she lived and worked. He cites these as examples of the kinds of culture jamming needed to enact the new story but to those for whom such direct engagement is difficult or too frightening, his message is reassuring, the seeds of the new story are sown in the simple actions of everyday lives and these are as important as grand acts of protest, televised speeches, and best selling books.

In this, Eisenstein brings a new twist to an old tale. Claiming no definitive personal awakening, he strips himself of guru status, and the story of any cloying mystical exclusivity by affirming that enlightenment is a collective act and that everyone has a role to play in its realisation. To this end, Eisenstein has avoided signposting his book with references to the august canon of perennial texts and personages. Despite alluding to a few selected passages from his own translation of the Tao Te Ching, and a passing mention of Gandhi, most of his references, quotations and anecdotes are local and contemporary. Although there is no doubting that his ideas are underpinned by a keen and knowledgeable intellect, I could see that Eisenstein wanted to democratise a story that often seems to exist only for souls living in the rarefied heights of advanced spiritual attainment but, I wondered, wasn’t the sermon on the mount an attempt to do precisely that too?

By doing so, this book escapes the confining categorisation of spiritual or New Age literature, no doubt reaching an audience who would otherwise dismiss it, but the absence of any sense of its perennial heritage left me dissatisfied, even uneasy at times: is not the depth, the richness of our sense of interconnection arrived at through seeing the tapestry the threads of this story have woven through time, and the vast variegated experience of human endeavour to keep them alive?

In the same way, Eisenstein distances the realisation of this collective enlightenment from the process of spiritual techniques and practices, instead advocating the Taoist principle of wu-wei, non-forcing, or freedom from reflexive doing. Nevertheless, implicit in the book is the demanding practice of learning to recognise the conditioned, often reactive, ways we use the language of separation continually to prolong and extend the narrative of separateness in our daily lives. I found myself wanting a sharper focus on this at the expense of some of the slightly repetitive meandering of the middle section of the book. Overall, I felt the book could have been edited more thoroughly and that some of the chapters, psychopathy, for example, deserved a couple of paragraphs in the chapter on evil, and that fewer chapters would have created a clearer, more effective narrative.

There is no doubt that as I was reading, I felt Eisenstein was articulating what I, and I’m sure many others, have felt for a long time and in a fresh, inspiring way. I would recommend the book for that alone. However, I did wonder whether this book might become fertile ground for a sequel that would consider in greater depth the language and art of story telling in the light of the story tellers and stories that have passed on the narrative of the heart through the age of separation.

Rupert Crisswell is an English teacher, family man and wild mushroom forager

Knowledge and Virtue

David Lorimer

THE MYSTICAL COSMOS

Joseph Milne

Temenos Academy, 2013, 71 pp., no ISBN – see www.temenosacademy.org

These lucid lectures take up the thread of Joseph Milne’s previous book, *Metaphysics and the Cosmic Order*. They are short and elegant expressions of metaphysics, something all too rare in our time. Moreover, we tend to be so blinkered by our own preconceptions that we fail to see the inadequacies of our worldview in relation to other orders

of knowing and being. Milne covers the forgotten metaphysics, the ancient view of nature, creation and revelation, and the mystical destiny of the universe. Each culture has its own orientation towards the real in terms of ontology, epistemology and ethics.

Our ideas of the meaning of knowledge no longer correspond to those of Plato and Aristotle who regarded the quest for knowledge as one combining pure intellect and virtue. The proper end of knowledge involves ‘a correlation between the knower and the known’ and the ultimate form of knowledge is the divine understanding with which humans can align; this is what he calls a reciprocal epistemology. The mind is thought to have an intrinsic affinity with the truth of things, and all things are oriented towards being known. Properly speaking, the intellect – as opposed to discursive reason – gives us our capacity to discern the unity of things. For the Greeks, intellect and conscience, wisdom and virtue, reason and ethics are connected and the concern of justice is to ‘bring the human realm into harmony with the universal order.’ This is a wonderful concept, even if rather foreign to our understanding, and one well worth recovering.

Plato did not separate good and truth, while for Aristotle every part of nature ‘seeks to actualise its own perfection and at the same time serve the good of the whole’, thus reconciling diversity and unity. Knowledge participates in the truth of things and is responsive to reality rather than representing it. Milne points out that we have lost this connection between the true and good at the same time as reducing our orders of knowledge to science which is claimed to be value free. He gives a very clear account of Aristotle’s physics and the terms he uses. His concept of thinghood is represented by *ousia*, while *energeia* means being-at-work. These two then merge into his concept of *entelechia*, ‘being-at-work-staying-itself.’ His *Phusis* is defined in a dynamic way as the activity of things ‘seen in their birth, growth, and self maintenance and independence of things and equilibrium of the parts of the cosmos.’ This dynamic understanding resonates with Goethe, while his idea of self-moving reappears in the modern term *autopoiesis* even if stripped of its teleological context. Milne’s review also reminds one of the participatory philosophy explained by Richard Tarnas in the epilogue of *The Passion of the Western Mind*. The universe comes to know itself through the human.

Many readers will be familiar with descriptions of mystical experience whereby the form of knowledge is immediate; the knower is one with the known, as pointed out as long ago as the ninth century in the work

of John Scotus Eriugina. The human soul is not so much a microcosm as the image of God’s knowing. So true or ultimate knowledge is divine knowledge – what Walter Russell calls knowledge of causes rather than effects. In a passage of extraordinary subtlety, Eriugina refers to the manifestation of the hidden, the comprehension of the incomprehensible, the understanding of the unintelligible, the materialisation of the spiritual and the visibility of the invisible – all of which is predicated on the idea that the creation is God made manifest and can be understood mystically in its essence. This cannot be understood either by literalist fundamentalism or its scientific counterpart reductive materialism.

In the final lecture, Milne reminds us that the ancients would not have understood the modern divorce between mind and the intelligibility or being of things. To know the mind of God is to know the knower of all things, and this beatific vision ‘is the true mystical end of human knowing.’ Meister Eckhart expresses something very similar when our knowing is understood as the very knowing of God so that it seems that God is knowing in us rather than us knowing on our own account. Within this understanding, God knows things *actually* that humans only *potentially* know. If we can conform our minds the truth of things, then we will also know how to act since ‘knowledge of the true and of the good are ultimately inseparable.’ This stage can only be achieved by a spiritual transformation of perception and an orientation of the human being not only towards the true but also towards the good and indeed the beautiful. The ultimate value of culture must be the extent to which its creations are reflections of these three principles. The book is closely written and deserves careful study especially since the modern mind is not immediately structured to understand our original orientation to reality.

The Healing of Creation

Sue Bayliss

CHRIST OF THE CELTS

John Philip Newell

Wild Goose Publications, The Iona Community, 2008, £13.50, p/b - ISBN 987-905010-52-3.

On a recent visit to Iona I attended a book reading at the Abbey book shop. As I listened to John Philip Newell expressing his rejection of the concept of original sin, embracing the importance of the feminine and revealing his deep desire for the whole of Christianity to honour the Earth as Celtic spirituality does, I felt tears running down my face. Tears of gratitude for the poetic way he gives expression to a Christianity based on the wisdom of the Celts.



Outside the room the rebuilt Abbey and the beautiful island of Iona provided the perfect backdrop for the much needed revival of values crucial to the healing of our world, the healing of creation in fact.

The starting point of his book is the disillusionment he sees 'within the Christian household today.' He writes: "There is despair about much of what Christianity has to offer. So many of its teachings and practices seem either irrelevant to the deepest yearnings of the human soul or flatly opposed to them. Why? Is it not in part because we have been taught to distrust our deepest yearnings rather than to see them as sacred? And is it not also because we have been given the impression that Christ comes to subdue or deny our deepest desires rather than to nurture and heal them?"

Drawing upon Celtic Christian texts and sources such as The Acts of John and the Secret Book of John he encourages us to form a different view of Christ and of ourselves. In the first chapter: The Memory of the Song, he explores "the Celtic image of Christ as the memory of what we have forgotten. He remembers the dance of the universe and the harmony that is deep within all things. He is the memory of who we are." Newell believes that at the heart of all humans lie wisdom, creativity and a longing for union. Our task is not to change our essence but to reach down to the forgotten core of ourselves which is in harmony with the natural world.

According to the lost Gospel of Thomas and other writings, Christ tells John that he has come to awaken us from a deep sleep, a "bond of forgetfulness". Our destructive tendencies come from a false sense of self. Sin is what happens when we are not being truly ourselves, 'not living

from the true root of our being.' Newell writes: "To say that the root of every person and creature is in God, rather than opposed to God, has enormous implications for how we view ourselves, including our deepest physical, sexual and emotional energies."

From this insight it becomes apparent that the concept of original sin has no place in this new vision of Christianity. In his view it is a doctrine that was taken up by the builders of empire in Roman times. Newell refuses to expose his youngest son to such negative messages: "I will not have him sit through liturgies or sermons that subject him to the belief that his deepest energies come from a sinful place." I can only commend such sentiments having reluctantly repeated: 'There is no health in us.' many times as part of the service of evensong whilst my son was a chorister.

In subsequent chapters Newell provides Celtic teachings to help us reconnect to the Earth and its creatures, challenges the idea of creation ex nihilo and explores the "Celtic belief that the Heartbeat of life is Love." According to Celtic tradition "Christ comes to show us that matter matters. Creation will be saved only if we learn to revere matter, whether that be the matter of our human bodies, the matter of the body of the earth, or the matter of the body politic and how we relate to one another as sovereign nations. The elemental notes of the universe are alive with Spirit."

Newell sees Christ on the cross as an expression of love rather than atonement for our sins, rejecting the idea that Jesus had to be sacrificed in order for God to forgive us. In his vision: "The whole cosmos is a Self-giving of God. And we will find our place in the great dance only to the extent that we love."

This is a refreshing and encouraging view of Christianity, one very much in line with the vision of Matthew Fox who has provided much inspiration to John Philip Newell. True to the Celtic tradition, Newell writes poetically, somewhat reminiscent of the wonderful Irish mystic and poet John O'Donohue. This is the language of soul, the language of the right hemisphere, metaphorical, relational, pointing beyond itself. The whole book works with the metaphor of music as the titles of the chapters testify: The Memory of the Song, the Rhythm of the Earth and Broken Cadences.

Newell was warden of Iona Abbey for many years after his studies of Celtic Christianity in Edinburgh. For those of us who have become disillusioned with traditional Christian practices and doctrines this book provides a holistic alternative which is vital for the shift in consciousness necessary for the healing of our world.

For Newell God is immanent in all nature and the universe, something which is easy to sense whilst on the beautiful island of Iona. Indeed John Philip Newell prefers to pray in the ruins of the nunnery than in the rebuilt abbey church. "The nunnery sits open to creation. Whether in sun or in storm, whether in the open skies of a clear morning or the infinite stretches of space at night, in the nunnery one is aware of the elements, of birdsong, of ivy leafed toadflax.. of unbridled wind. It is this that so many of us are looking for in our spiritual journey today, a connection between spirit and matter, the ancient bond between the wild and the sacred, an openness in relationship between prayer and cosmos."

These are uplifting sentiments in an uplifting book and I feel honoured to have enjoyed the author's gentle and modest presence.

Sue Bayliss is holistic psychotherapist, wellbeing consultant and trainer. www.sulisconsulting.com

The Web of Life

Jean Hardy

IN THE BEGINNING WAS THE SPIRIT: SCIENCE, RELIGION AND INDIGENOUS SPIRITUALITY

Diarmuid O'Murchu

Orbis Books, 2012, 240 pp., \$22, p/b – ISBN 978-1-57075-995-6

This is a careful book and a very bold book. Diarmuid O'Murchu is seeking to push out the present boundaries of modern Science and Religion, which are rooted together in the values of sixteenth and seventeenth century Europe. These values were and are empirical, rational, investigatory, materialistic and individualistic. They saw the beginnings and growth of capitalism worldwide; the emergence of our present proof-based science; the European exploration and possession of cultures that had previously been largely unknown to Europeans, in Africa, India, northern and southern America, Australia; and a Christianity which has been based on the authoritarian values of Empire from the 3rd century onward under Rome. These values dominate our modern world. They put humans at the centre of the Universe, and in a grasping and arrogant way.

Diarmuid, a Catholic priest of the Sacred Heart Missionary Congregation, is the author of many books exploring the deep and profound roots of Christianity and its sense of the sacred. He has considered the global dimensions of Christianity for major disciplines in the West, especially the materialistic

Science most valued today, which is of course the kind of Science questioned by the Scientific and Medical Network.

I don't feel like reviewing this book in the ordinary way, I feel like cheering it, and saying – yes, of course, this is the truth! And truth given in a kind, careful, elegant way, allowing the reader to pause from time to time in each chapter and consider what has been said without expectation from the author.

The sense of Spirit is present from the beginning of the book – the Spirit which is different from Soul and Religion – 'soul' is too individual in the way we usually mean it, and religion is too prescriptive with its God seen as a dominating male human figure. But as a Christian, the author has contemplated and lived with the Holy Spirit, the third person of the Trinity: what he wants, though, is the inclusion of what he calls the Great Spirit – the spirit of the universe in which all creation shares. In the Christian Trinity, God the Father, and Jesus, are of course the first divine figures, very central. The Holy Spirit has been seen in what he calls a 'more ambiguous' role for many Christians – though less so in the Orthodox churches influenced by Eastern understanding.

The middle chapters of the book are a survey of some of the earlier spiritual beliefs of the human race. He gives an extended and fascinating account of indigenous peoples and their relationships to each other, to land, to spirituality and to the universe, in what we now call Africa, South and North America, and Australia. He considers too the ancient religions of the East, especially in India and China, especially Hindu, Jain and Taoist understanding of the roots of our existence. Whatever the difference in the content of the early religions, their deepest approach to the mystery of their lives is expressed by Chief Seattle, an American Indian protesting in 1854 at the enslavement of his country by the Europeans: "Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web we do to ourselves. All things are bound together. All things connect." We have only to look at the dangerous mess of our modern world to see how true this is when this understanding is lost.

What can we learn from earlier societies that is relevant today? A long section of Diarmuid's book is an exploration of the original Great Spirit based on our early close connections with the earth and its creatures, where life is mysterious and the spirit present in all beings. In Eastern thought, spirit is synonymous with Chi, energy, the life force, our essential being. In Hindu thought, Brahman is the Great Spirit and Atman that element of the spirit at the individual centre of every living being: it is all One. I would like to

quote Diarmuid's Pause on page 95: "It is not that those ancient people told literal stories and we are now smart enough to take them symbolically, but they told the stories symbolically and we are dumb enough to take them literally". Modern rational cultures are largely oblivious of symbolism, of the depth of being – though of course many individuals relate and find their personal paths to a deeper understanding. Our knowledge in general is rational not spiritual, concerned with usefulness rather than with meaning.

The majority of societies on earth have seen the Spirit not as an impersonal power, but as a personal presence in each of us, and in the universe as a whole, creating a multitude of relationships at all levels of life – with individuals, friends, families, animals and plants, organisations, causes, the earth and the universe – all these are alive. We can relate from our own deepest being, because the Great Spirit is at the heart of all being, over time and space. We come from spirit and return to spirit at death. This has been at the heart of so many cultures since the beginning of human life on earth. But it is not a common experience in the modern world. This dimension is largely missing in most of our societies and in our present world order. It is also denied in most of the sciences and religions, and in the present organisation of human knowledge, where the Western propensity for cutting through the whole often destroys the integrity of what is there. Western thought is dualistic – things are either good or bad; but the wiser older understanding is that 'good' and the 'bad' is present in all: we live with ambiguity and need depth.

So many of us feel that human society is following a disastrous path in many ways. This book is a plea for us to follow an older wiser path, where humans are seen as a recently arrived presence in a very old universe, and we need compassion, humility and wisdom, not acquisition. In the beginning was the Spirit: she is still here.

Dr Jean Hardy, a longstanding member of SMN and author of four books, takes great delight in Diarmuid's latest contemplative and original study, as she always recognises his search for the mystery of creation as being similar to her own: more than that, he here seeks the transformation of the whole of Christianity!

psychology-consciousness studies

Does it Work in Theory?

David Lorimer

SUPERNORMAL

Dean Radin

Deepak Chopra Books (Random House, 2013, 369 pp., \$14, p/b – ISBN 978-0-30798690-0

There is a well-known story about a French consultancy company who had their own very distinctive ideas. When confronted with something that worked in practice, their question was: does it work in theory? This is the difficulty faced by many scientists when dealing with parapsychology. Within their current materialistic framework, ESP does not work in theory since it contravenes their understanding of basic scientific principles: hence the need to explain the research away or attribute it to methodological flaws or fraud. However, as Lawrence LeShan pointed out in a recent book, impossible things do not happen, so it is your theory that needs modification if it is unable to explain the data. This is an uncomfortable situation.

Dean Radin will be known to many readers from his previous books *The Conscious Universe* and *Entangled Minds*. He is a senior scientist with the Institute of Noetic Sciences and is one of the most distinguished and experienced parapsychologists, having been President of the Parapsychological Association. His books combine a comprehensive knowledge of the field with lucid accounts of his own experiments and sophisticated philosophical discussion of psychological factors affecting interpretation of experiments. Here he takes a slightly different starting point, reflected in his subtitle of 'science, yoga and the evidence for extraordinary psychic abilities.' The so-called siddhis are an integral part of yoga philosophy and these capacities are expected to develop in advanced spiritual practitioners such as the guru of Yogananda – Sri Yukteswar – and in the West figures such as St Padre Pio and the Bulgarian sage Peter Deunov. Exercise of these powers is not encouraged as they are considered something of a distraction from true spirituality. Dean explains the Indian background and shows that all the phenomena investigated by modern parapsychology have their counterparts in yoga philosophy.

The three parts cover the general background of legendary yoga superpowers, systematic research by modern science and speculation

about future directions. In his foreword, Deepak Chopra already highlights the issues with prejudice when confronted with contravening facts. The outcome is frequently that people don't so much change their minds as interpret things to confirm their previous beliefs. He quotes Max Planck as saying that he regards consciousness as fundamental and matter as derivative from consciousness, since we cannot get behind consciousness.

Over 50 years ago, CD Broad outlined what he regarded as the basic limiting principles of science, with which parapsychology seems to conflict: it is impossible to have an effect before a cause, direct mind-matter interactions are impossible, mental events depend completely on the brain, and finally that we cannot gain information about anything outside the body except by means of the ordinary senses. These four limiting principles rule out *a priori* the entire subject matter of parapsychology: precognition, psychokinesis, healing at a distance, out of body experiences, survival of consciousness, clairvoyance and remote viewing. Textbooks rarely mention the topic, and, if they do, only to dismiss it (Dean provides examples of this). Towards the end of the book, he presents his own version of these limiting principles consisting of realism, localism, causality, mechanism, physicalism, materialism, determinism and reductionism. University students absorb these doctrines without realising that they are in fact assumptions and guidelines rather self-evident facts. Dean points out, like Rupert Sheldrake, that these doctrines have all been falsified by advances in physics.

The second part of the book presents scientific studies in telepathy, precognition, psychokinesis in living and inanimate systems, and clairvoyance. In many cases, Dean adds detailed accounts of his own research and methodology. He explains the role of meta-analysis and the nature of effect sizes, which are often small in extensive studies. He also elaborates on the nature of Bayesian statistical analysis as a useful method for objectively specifying how an investigator's previous beliefs ought to change when confronted with new data. The null or chance hypothesis is set by the investigator and the outcome should be determined by an analysis of the alternative hypothesis compared with the null hypothesis. Of course, this can be set up to make a result almost impossible, but it does provide a logical framework of measurement. Throughout the book, Dean demonstrates that the accumulated scientific evidence for these phenomena under consideration give odds against chance of millions if not billions to one, which should count as extraordinary evidence for

extraordinary claims. This is especially true of Ganzfeld experiments.

The fundamental issue is one of the politics of knowledge and the psychology of belief. All too often, investigators like Michael Shermer have interesting things to say about the beliefs of other people, but they do not apply strictures such as confirmation bias to their own views. There is a strong taboo effect that keeps the current worldview in place, and this may well be reinforced by the predominance of sensing-thinking-judging personalities in the higher echelons of business, academia and government agencies. Intuitive-feeling people are much more likely to be open to the kind of research presented in this book and also more likely to have such experiences themselves. All this helps explain the resistance to changing scientific paradigms, but Dean puts his hope in the younger generation and sees some signs of progress. However, these younger people depend on their seniors for advancement and so there is an inherent conservatism built into the system.

On the basis of the scientific studies cited, Dean concludes that the supernormal abilities described in Patanjali's yoga sutras have been verified beyond reasonable doubt. One important pioneer in this field is the Dalai Lama, who has been in dialogue with scientists through the Mind and Life conferences for over two decades. This is another forum in which the spiritual and empirical scientific views can meet in a spirit of openness and rigour. The Dalai Lama challenges scientists to expand their views of reality, as does this book - much depends on how many scientists take the trouble to read it. Like his previous books, the current one is a very important statement and required reading for those on the cutting-edge of consciousness studies.

The Great Connect

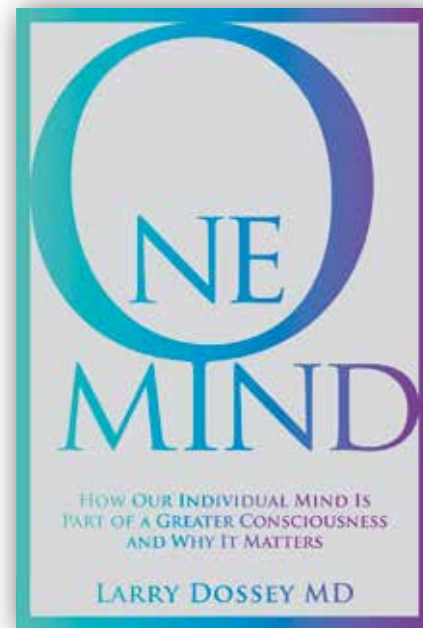
David Lorimer

ONE MIND

Larry Dossey MD (SMN)

Hay House, 2013, 339 pp., £12.99, p/b - ISBN 978-1-78180-1963

Regular readers of this Review may recall that, over the last two years, I have reviewed a number of books from the late 19th century New Thought movement, including the 1890 landmark publication by Thomas Jay Hudson entitled *The Law of Psychic Phenomena*. Hudson influenced many subsequent thinkers, including Thomas Troward, Charles Haanel and Napoleon Hill. All of these thinkers posited an unlimited aspect of the human mind whereby the individual mind was a microcosm of the Universal or Divine



Mind which was in a sense omniscient. Although Hudson mentioned this possibility, his own model is somewhat different, and is based on his reflections about hypnotism and the capacities to which this state enabled access. He distinguishes between the objective and the subjective mind. The first is the recognisably analytical and linear mind, which he supposes is dependent on the brain. The subjective mind, by contrast, has unlimited powers and he equates this with the soul that survives the death of the body. Interestingly, he gives some of the same examples as in Larry's book, including miraculous mathematical calculation and clairvoyance.

Charles Haanel, in his *Master Key System*, also influenced by Hindu thought, takes the model further. He too upholds the distinction between the subjective and objective minds, but he further postulates that the Divine Mind is also subjective and amenable to suggestion. In his model, the subjective mind is equated with the subconscious, which also enables people to access the Divine, which some modern thinkers would equate with the Superconscious. Walter Russell also experienced omniscience through an alignment with the Divine Mind, as described in my review of his book in the last issue. All this is to say that the idea of One Mind put forward by Larry has a distinguished ancestry. Indeed, his own first intellectual encounter in this sense was with Ralph Waldo Emerson, who influenced the thinkers already cited - especially his extraordinary essay on the Oversoul, which Larry read as a 16-year-old before being subjected to the intellectual straitjacket of reductionist medical training. The fact that he is an identical twin adds a very personal understanding to his treatment of the One Mind.

As one might infer from the title, Larry brings together a wide range of phenomena to consider in the light of his thesis. At the beginning of the book, he makes a number of predictions about what would be possible in the light of One Mind at different levels. He describes many and varied experiences that are hard or indeed impossible to explain within the conventional scientific model. This will be familiar territory to many readers, including research on the sense of being stared at, coordinated animal and bird movements, animal telepathy, creativity, telesomatic experiences, NDEs, survival of consciousness and healing. Other parts of the book, like the urge to save others, are less familiar territory and postulate an immediate empathy as an aspect of One Mind.

He describes as neuromythology the assumption that consciousness is entirely dependent on brain processes, and the evidence that he adduces makes this proposition impossible to sustain. However, scientists would regard much of as anecdotal and therefore unconvincing. This argument misses the point since it postulates that only one way of knowing and methodology as valid and fails to recognise that anomalous human experiences still need to be explained within some kind of framework. It is not enough simply to dismiss them and say that life experiences cannot be reproduced in the laboratory so they don't count. The important point is that Larry tips the balance towards oneness, when so much of our thinking is predicated on separation and individualism. For this reason, he feels that the hypothesis of One Mind is important for the future of humanity. The key quality is that all these experiences involve unbounded or nonlocal extended awareness, what Rupert Sheldrake calls the extended mind. Larry also quotes Jeremy Rifkin on the differences between old and new science. While old science views nature in terms of objects and manipulation, the new science sees nature as relationships and partnership. These are important trends that are also being reinforced by other disciplines, especially environmental and our technological connectedness. There is also a host of new metaphors including the hologram and the implicate order as well as non-locality and entanglement already mentioned.

Having traversed with his vivid and engaging narrative an extraordinary and diverse landscape of ideas and experiences in the light of the One Mind, where does Larry see the future? As with so many books reviewed on these pages, he calls for the expansion of science beyond its existing philosophical assumptions, especially the hypothesis that the brain gives rise to the mind and consciousness.

Larry feels that consciousness is the elephant in the living room of science and that the integrity of science and scientists will ultimately lead to a transformation. His final chapter is devoted to transcendence and the spiritual implications of One Mind experiences characterised by a 'hyperreal level of awareness, connection, intimacy, and communion with the greater whole' also imbued with love.

Even the most hard-headed reader, if he reached the end of the book, would be obliged to admit that Larry is onto something important. However, he might wish for the thesis to be further developed philosophically and applied rigorously at a number of different levels, which Larry begins to do in his chart on the universal spectrum of love where he discusses various types of interacting systems along with the evidence and expression of interaction. This pioneering book is a brilliant synthesis mapping a vast territory of One Mind experiences, but I there is surely still further work to do on elaborating the detail of how One Mind as a unitary domain of intelligence operates in different contexts.

Spiritual Psychology

David Lorimer

PSYCHOLOGY AND THE PERENNIAL PHILOSOPHY

Edited by Samuel Bendeck Sotillos

World Wisdom, 2013, 220 pp., \$23.95, p/b - ISBN 978-1-936597-20-8

This book is published in the series Studies in Comparative Religion, which is devoted to 'the exposition of the teachings, spiritual methods, symbolism, and other facets of the religious traditions of the world, together with the traditional arts and sciences which have sprung from those religions.' Its perspective is perennial philosophy and essays by many of its leading exponents appear in this book: Titus Burckhardt, Ananda Coomaraswamy, René Guénon, Seyyed Hossein Nasr, Marco Pallis, Frithjof Schuon, Lord Northbourne and Huston Smith. There are four parts to the book: critique, theoría, praxis and reviews of books by Eckhart Tolle, Ken Wilber and Jorge Ferrer. The authors believe that we live in a desecralised and indeed profane world and that this is reflected in our science and psychology. They espouse a distinctive metaphysic that I have personally found very illuminating. William Stoddart explains this understanding of the threefold constitution of man as consisting of Spirit or Intellect, soul and body corresponding to the Latin *spiritus/intellectus*, *anima* and *corpus* and the Greek *pneuma/nous*, *psyche*

and *soma*. In addition, the divine is conceptualised both in terms of a personal God and an absolute divine essence. One can appreciate that these different ontological levels have their own epistemology and that much of modern thought operates at the level of the body and the senses while neglecting or even denying the higher levels of soul and spirit.

Many of these writers are uncompromising in their stance with respect to knowledge and religion, condemning anything that falls short of their rigorous standards. For Schuon, there can be no science of the soul without a metaphysical basis, and this is precisely what is missing from modern psychology, especially insofar as it is based on an empirical and reductionist approach characteristic of modern science. He sees psychology as a usurper of religion with disastrous effects whereby the abolition of guilt 'allows the patient to go serenely to hell.' Guénon writes about the confusion of the psychic with the spiritual, which is undoubtedly an important issue. Burckhardt is concerned about the lack of a higher explanatory principle able to explain the nature of the soul. The contribution by Philip Sherrard on the science of consciousness dates back to a conference in 1992 in Athens, which I attended. I read his books around the same time and his basic argument is that the knowledge of the nature of consciousness does not lie within the competence of the modern scientist who has not attained the highest state of consciousness. The way in which something appears to me depends on my mode of consciousness. The 18 pithy reflections are followed by a more extensive explanatory letter - I do believe that some of these concerns were addressed at the conference, but perhaps not to Sherrard's satisfaction.

The second part covers a wide range of themes relating East and West, science and religion, Buddhism and modern psychology and the whole issue of drug induced mysticism. The five bugbears of modern thinking for the perennial philosophy are psychologism, scientism, evolutionism, syncretism and New Age thought; one can also add reductionism and relativism to this list. The first three have a tendency from this viewpoint to explain the greater terms of the lesser, which does not allow for emergence. One can most readily see their point when psychology is used to explain the spirit from within its own terms of reference, reducing the spiritual to the psychological. This lies at the root of the perennialist critique of Jung, with some justification. Jung is given credit for taking religion seriously, but castigated for treating meta-physical assertions as merely psychological phenomena and for statements such as 'the mind cannot establish or assert

anything beyond itself.' One suspects that this may have been the meaning of Jung's statement that he knew that God existed as a psychological construct rather than a metaphysical reality. In other writings he seems to go further, but one should remember that he was constantly being criticised by his colleagues as a mystic and was trying to remain true to his calling as a scientist. He was therefore treading a narrow middle path. For perennialists, the intellect enables human being to apprehend absolute reality, so they feel that Jung was implicitly denying the existence of the intellect.

In his essay, Sotillos covers other psychologies from a perennialist viewpoint but also through the lens of his conviction that we are living in the decadent era of the Kali Yuga, a traditional speculative framework that he almost personalises by attributing spiritual trends to its influence. Psychoanalysis becomes a symptom of cultural decay. Scientism imprisons us within the five senses, while syncretism is seen as a parody of synthesis and new age thought as wrenching spirituality from its religious context and producing a counterfeit based more on the ego than the spirit. The same applies to psychotherapy insofar as it aims to restore balance to the ego. Huston Smith produces a succinct summary of the principles of the perennial philosophy (p. 90), while Ken Wilber comes in the firing line for the way in which he characterises the possible integration of pre-modern religion with modern science, especially as he takes an evolutionary view. Segura regards his project as a category error: 'the mixing of metaphysics-based traditional postulates with reason-founded secular science' and therefore a misunderstanding of truth and an assumption that religion is essentially a man-made rational construct. This critique is extended in the book review section at the end, which certainly gives the reader a very different view of these thinkers.

Another key theme is drug-induced mysticism - the mescaline hypothesis of Aldous Huxley. The two essays are by Whitall Perry and Charles Upton. Perry states that 'nothing could be more erroneous than the belief that the magical operation of some external power on the psychic faculties could in itself effect a real and lasting trance mutation of soul, especially apart from all question of suitability and preparation of the vehicle involved.' In other words, there are no shortcuts, and Huxley is confusing the psychic with the spiritual in spite of his erudite background. The interview with Charles Upton is fascinating because he himself was once an advocate of drug-induced mysticism and is now a stern critic. The aim is not so much altered

states as altered traits. He is critical of Huston Smith, himself sympathetic to entheogens and who complained that he never regained the initial insight provided by acid. Upton adds that Eliade considered the introduction of entheogens to shamanic techniques as a form of decadence. It seems to me that it all depends on the context and intent.

The third part on praxis is shorter, with an important essay by Coomaraswamy on *metanoia* or being in one's right mind. This is also relevant to the earlier critique of drugs in that *metanoia* implies the transformation of one's whole being from human thinking to divine understanding. This is a real change of mind, not simply of state. As a whole, the book makes for bracing reading and shakes up modern complacency by obliging the reader to consider a more metaphysical perspective and exploring the real meaning of sacred psychology. It would be interesting to set this up as a conference.

The Great Transformer

David Lorimer

DEATH AND LIFE

Bruno Bitterli-Fürst

Ravare Books, 2012, 190 pp., no price given, p/b - ISBN 978-0-956-704009

The pioneering work of Elisabeth Kübler-Ross on death and dying will be known to many readers. She herself died in 2004, and I came across this book on a table at Hawkwood College in September. On opening it, I discovered that it claimed to be a message from Elisabeth about her experiences since her own transition and her current understanding of the nature of death and dying. Having read it on a trip to Italy in October, I am convinced that this is a genuine message from Elisabeth and one of the most important books ever published on the subject. Part of her work concerned the transformation is implied in the dying process, and this theme comes through very strongly in the current book. As you can imagine, the author himself was somewhat sceptical when Elisabeth came through, but her voice is powerful and distinctive as ever.

The title suggests the intrinsic relationship between death and life. Transience means that no form is permanent and indeed nature is in a continuous process of transformation. Out of decay and death comes new life, as we can see from the compost heaps in our garden. We are constantly in a position of

being challenged to let go of the old and embrace the new. We are both acquiring and disposing. Elisabeth explains that death serves life because it consumes everything that life no longer needs for its perpetuation and progress. This actively supports the dynamic of change underlying the whole of life as Goethe understood when he said that death is life's way of producing more life. Death is in this sense a great transmuter of useless aspects.

Fear is a very important theme in relation to death, and Elisabeth explains that it dampens and delays the process of dying by creating resistance: we cling to life because we have not learned to die. Consequently, delaying death simply lengthens a miserable life of reduced quality. She therefore encourages readers to disengage the idea of death from fear, which requires considerable spiritual work. As she used to say in her workshops, fear of death translates into fear of life, fear of fully engaging. She encourages us instead to regard death as a life-enhancing experience leading to transformation. An important corollary is the modern separation of the human (ego) from the divine. People who do not feel themselves separate experience their essence as a divine being that can by definition not be extinguished: 'only in the falsely perceived absence of God does death appear as something final.' The book gives some powerful examples of people coming to terms with death after a terminal diagnosis. The lesson is to maintain contact with the structure of the soul rather than being completely preoccupied with the reality of the senses.

In a striking sequence, Elisabeth describes her own transition, for which she was uniquely prepared through her life work. There was a great sense of reunion, expansion and joy but then she was immediately presented with a new assignment of accompanying people on their transition - described as a service of love. First, however, she had to take leave of her physical body and thank it for all its service. She explains how the finer structured bodies emerge from the physical at death, but then there is also a corresponding psychological process that can take a lot longer, especially for those who have found it difficult to let go. We can initiate this kind of process during life by clearing out thoughts, emotions and possessions we no longer need. Elisabeth challenges readers to reflect deeply on their attitude to death and what this means for their corresponding attitude to life (pp. 84, 128). She affirms the possibility

that we can all manifest the higher and deeper aspects of ourselves in physical incarnation and even merge more closely with our guidance. This is true creative self-expression. She also refers to a red thread of inner determination, which we should seek to align with.

At the beginning of the third part (p. 112), there are some memorable aphorisms about death as a human construct and ways in which we can break down this barrier. We need a new culture of death, towards which many people have been working over the last 40 years. The ideal across many cultures is conscious death unimpeded by fear, but this can only be reached through serious spiritual work and reflection, as every reader will recognise. An important part of this process is understanding one's main purpose, which itself requires desire and courage to become an expression of love, which Elisabeth affirms is the ultimate substance of life. Readers will appreciate that this remarkable book contains a hugely important message, not only about death, but also about the nature of life and transformation. Even those already familiar with the field will learn a great deal and will be challenged to live more deeply and fully.

ecology-futures studies

Natural Capital

David Lorimer

WHAT HAS NATURE EVER DONE FOR US?

Tony Juniper

Profile Books, 2013, 324 pp., £9.99, p/b - ISBN 978-1-84668-5606

Tony Juniper is one of Britain's best-known environmentalists, a former director of Friends of the Earth and one of the co-authors of *Harmony* by HRH the Prince of Wales, who writes a long and passionate foreword to this book. It is obvious to those who have thought deeply about the issue that we need to revise our attitude towards and understanding of Nature. Our present attitude is exploitative and manipulative based on the separation of humans from Nature and an attempt on our part to subjugate it and use it exclusively for our own ends. This goes back to the mechanistic understanding of the 17th century, which has also been translated into economics and still dominates biology. With this background one can understand that economists have started to think about the value of the services provided by Nature that actually underpin our economic activity.

Some estimates put the value of these services at \$100 trillion, twice the global GDP.

The book is based mainly on Tony's own experiences and research of best practice to offset destructive human activities in various environmental domains. There is no bibliography and some parallels that might have been made, for instance with the eco-economy proposed by Lester Brown, are not mentioned. Instead, Tony proposes his own model of a bioeconomy, which amounts to the same thing. Each chapter begins with a few striking statistics, of which the following is a sample: one third - farmed soil degraded since the mid-20th century; 70 billion - annual cost of nitrogen pollution in Europe; larger than Germany - area of forest cleared 2000-2010; \$1 trillion - annual sales dependent on animal pollination; \$50 billion - extra value that could be gained from well-managed fish stocks; over 50% - proportion of oxygen produced by plankton; \$6.6 trillion - annual global environmental damage caused by human activities (11% of world GDP); \$34 billion - costs associated with the loss of vultures in India.

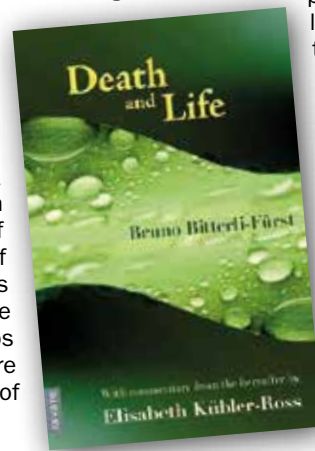
This last figure is one of the most interesting cited, and is an excellent example of an unpredictable systemic effects with far reaching implications. In 1993, there were around 40 million vultures in India, but by 2007 the population of the two lane species has dropped by 99.9% and 97% respectively. The cause was an anti-inflammatory drug with the usual unpronounceable pharmacological name - diclofenac. It turned out that its dramatic beneficial effects on sick animals made the drug very popular but if these animals were treated only a few days before their death, traces remained in their bodies, which were then eaten by the vultures. This poisoned them in large numbers as many vultures feed on a single carcass. Needless to say, carcasses left out to putrefy in the sun of health hazard. In addition, the Parsi community was no longer able to leave their dead bodies out for the vultures and had to invest in expensive new technology. In the early 1990s, these vultures were consuming about 12 million tonnes of meat a year, which it was calculated would feed an additional 4 to 7 million dogs. This seems to have been what happened, and these feral dogs also carry diseases, not to mention an extra 40 million dog bites because of this increase in numbers and also around 48,000 additional deaths from rabies in the period 1992-2006. All in all, the cost of the loss of the vultures is estimated at \$34 billion.

At the beginning of the book, Tony explains the Biosphere 2 experiment where a small group of people was able to live inside a sealed off habitat for two

years. They discovered a great deal in the process, especially close linkages between the various natural systems. We need to remember that the Earth is similarly a sealed off habitat. The individual chapters consider soil, light and photosynthesis, eco-innovation, pollination, natural pest control, water, the seas, then Nature as a form of insurance and as a natural health service. As well as pointing out critical issues, Tony gives many examples of encouraging initiatives that are moving in the right direction. Among these are wetlands being managed as sewage treatment facilities, the creation of marine reserves and the protection of coal reefs and the maintenance of mangroves to contain storm surges.

In the last chapter, Tony looks at the prevailing model of Nature whereby the liquidation of natural capital is treated as a stream of dividends rather than spending of capital. Some readers may know of Earth Overshoot Day where human consumption of renewable natural resources exceeds supply - this now happens at the end of August. In other words our consumption is unsustainable in the long-term. This is a reflection of a more endemic problem, namely short-termism, both political and economic. One CEO is quoted as saying in relation to his interests in land and forests that 'natural resources are limited, and I need to take them before they're gone.' This represents an ecological version of a Ponzi scheme. Although many people are quoted as saying that business as usual is not an option, this is precisely what we are doing.

His answer, referred to above, is a bioeconomy, which Tony has been promoting to companies for some years. Perhaps the most encouraging example of a country reorienting itself is Costa Rica, which has reversed its deforestation and become a major magnet of ecotourism, enhancing its GDP per capita in the process. Tony feels, quite rightly, that religions can play a significant role in changing attitudes and realising that nature is 'the source of essential services: a provider of insurance, a controller of disease, a waste recycler, an essential part of health provision, a water utility, a controller or pests, a massive carbon capture and storage system and as the ultimate converter of solar energy.' Eventually, we will have to live within the overall natural resources available, but it would be sensible, as this readable and hugely informative book suggests, to move consciously in this direction sooner rather than later.



The Patterning of Hope

David Lorimer

THREE HORIZONS

Bill Sharpe

Triarchy Press, 2013, 127 pp., £12, p/b
– ISBN 978-1-909470-27-9

In the Spring issue, I reviewed a book called *Dancing at the Edge* by Graham Leicester and Maureen O'Hara of the International Futures Forum, with whom I myself have been working since 2001. This book comes out of the same stable and articulates a particular model that has been successfully used in a number of contexts by the IFF. The premise of their work is that

we live in a world that we cannot fully understand or control, but there are creative ways of navigating uncertainty. The Three Horizons framework is one of these methods and is clearly articulated in this stimulating book. The aim is to help readers develop 'a future consciousness' in the present by realising that there are different perspectives that can be incompatible.

Horizon 1 (H1) embodies established patterns of thinking and behaviour while Horizon 3 (H3) represents the emergence of a new pattern and Horizon 2 is transitional. This is more easily understood graphically where H1 is declining, H2 currently rising and H3 only rises at some point in the future. There comes a point when we realise that aspects of H1 are inadequate and their recipes for improvement fall short - the whole system loses its fitness for purpose. H3 is intrinsically transformative, bringing in new patterns that are out of reach for H1 mentalities. H2 sits in the middle as a transition and transformation zone responding more immediately to the shortcomings of H1 while anticipating some of the thinking emerging in H3. The overall approach explores the future as an interaction between the three horizons or perspectives. They correspond to distinctive mindsets: H1 is managerial and attempts to maintain the system, H2 is entrepreneurial in its approach to opportunities while H3 is visionary and aspirational. These models and attitudes can be creatively applied to a great many different situations while recognising the world in terms of constantly shifting patterns of activity.

Bill takes forward his analysis with five key propositions relating to the nature of future consciousness as an awareness of the future potential of

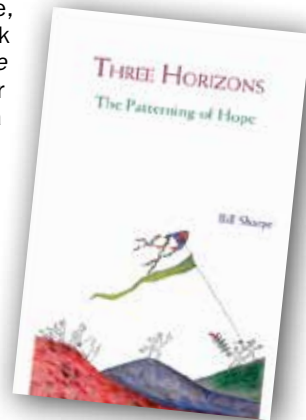
the present moment, transformational change as repatterning rather than an extension of the present, transformative innovation working with three different qualities of the future, the collective practice of bringing three basic perspectives into the room, and the recognition that every person is a unique source of transformative insight

and human potential. We see the pattern, put ourselves in the picture and are enabled to convene the future. The next part describes these practices in more detail with the useful phrases 'holism with focus' and 'learning to love uncertainty.' We begin to recognise patterns of integrity and ways in which we can make wholeness through creative integrity while respecting the perspectives of other people.

A useful chart summarises both negative and positive perspectives of each horizon on the other.

The section on case studies explains the three phases of sense making, strategic conversation and visionary action leading to patterns of renewal. Clients include the Carnegie Commission on Rural Community Development, the Schools Inspectorate, NHS Fife, the Scottish Broadcasting Commission and Southcentral (Health) Foundation in Alaska. Quite frequently, the initiative will inspire two or three key members of staff who are prepared to try something different and support each other in the process. The patterning of hope involves living rather than knowing our way into the future and is much more pragmatic than ideological. It is also personal rather than mechanistic and reflects natural processes of growth. It goes beyond the extended present and hope as defined by Bill expresses the possibility of 'a renewal of the human,' both personal and collective. He uses a good analogy of a group of musicians improvising together once they have chosen a theme. They can then respond to each other in order to fulfil a common purpose and a unique mutually supportive pattern of relationships.

Bill ends with a Polynesian metaphor of navigating with the help of imagined islands. He proposes islands of abundance, infinite diversity, mutuality and finally a floating island of improvisation underpinned by hope. Whatever your strategic challenge, I can guarantee that using the Three Horizons framework will shed light on the process, and I recommend this lucid and engaging book as an essential primer.



general

Character, Values and Achievement

David Lorimer

HOW CHILDREN SUCCEED

Paul Tough

Random House, 2012, 231 pp., £12.99, p/b – ISBN 978-1-84794711-6

MINDSET

Carol S. Dweck

Constable and Robinson (Random House), 2006, 277 pp., £9.99, p/b – ISBN 978-1-78033-200-0

FROM MY HEART

Neil Hawkes

Independent Thinking Press, 2013, 178 pp., \$23.95, p/b – ISBN 978-1-78135-106-2

Readers may be aware that I have been running a values programme in schools for a number of years, both through the Network and more recently through Character Scotland, a charity of which I am chief executive. The programme is called Inspire> Aspire and you can find details on our website – www.inspire-aspire.org.uk The project focused on London 2012 has just come to an end and our current project is Global Citizens in the Making around the Commonwealth Games in Glasgow in 2014. We use a special template to encourage young people to gain self-knowledge and self-awareness, inspiration and to define their aspirations for the future. It is a powerful exercise and we have over 25,000 young people signed up this year. In addition, the Jubilee Centre for Character and Values has been established in Birmingham University under the leadership of Prof James Arthur and also supported by the John Templeton Foundation. This is by way of background to these important books. The first two are based on recent scientific, educational and psychological research, while the third explains Neil's development of values-based education. In a nutshell, as Zig Ziglar famously put it, it is your attitude rather than your aptitude that determines your altitude.

The subtitle of the appropriately named Paul Tough's book is 'grit, curiosity and the hidden power of character.' It is a fast paced journalistic report that uses personal stories to bring the science alive. Partly as a reaction to the cognitive hypothesis that IQ is the crucial variable, recent research has shown that what really matters is the development of a set of qualities including persistence, self-control, curiosity, conscientiousness, grit and

self-confidence. When combined with intelligence, these will take a person much further than intelligence alone. The reader will observe that Tough lists what are technically known as performance virtues rather than moral virtues, which are more of a focus in Neil's book. A key educational issue around the world is the achievement gap between students from different social backgrounds. Tough rightly points out that this has a biological and biochemical aspect with the pathways laid down in the first few years of life as a result of parental interaction. In this country, much of this important work has been reported by Paul Gilbert in his book *The Compassionate Mind*. One implication should be to put parenting skills for further up the list of priorities, as we find, not only in rats but also in humans, that licking and grooming or their equivalent is crucial in the healthy development of self-esteem. Parents need to support but also challenge their children, helping them cope with and learn from adversity.

At the end of the 1990s, the KIPP (knowledge is power program) helped young people from disadvantaged backgrounds achieve outstanding academic results, but then many of them failed to graduate from college because they did not have the emotional and psychological preparation for independent study. This is where Martin Seligman's learned optimism came into the picture and helped students close the gap. Researchers came up with the following list of qualities: grit, self-control, zest, social intelligence, gratitude, optimism and curiosity. They then created a programme based on the development of these qualities. It was also found that affluent young people use relatively more alcohol and drugs, apparently because of excessive achievement pressures and physical and emotional isolation from parents.

There is an interesting case study concerning the chess team at Intermediate School 318 in Brooklyn. With an inspirational teacher, these disadvantaged young people achieved extraordinary results in national competitions. The chapter is entitled 'how to think' and one can readily appreciate that the process of playing chess on a regular basis not only encourages this capacity, but also teaches one to learn from one's mistakes, and challenges the ability to control emotions under pressure. These students demonstrated grit defined as self-discipline wedded to a dedicated pursuit of a goal. There is also a focus on individual students so that one can understand what it takes to close the achievement gap and successfully finish a college course. There is much for policymakers to ponder on in formulating practical responses to these findings.

Mindset is based on a simple and powerful distinction between a fixed and a growth mindset, which has implications for business, parenting, schools and relationships. Dweck's starting point is understanding how people cope with failure, which led her to formulate her theory. She found that some young people relished challenges and realised that every failure enabled them to learn something important to increase their capacity. Believing that your qualities are carved in stone - defined as the fixed mindset - means you have to prove yourself repeatedly and are correspondingly nervous of failure. On the other hand, the growth mindset is based on the belief that one can improve one's capacity through effort. Dweck gives the number of real-life examples to show how those different mindsets would respond. Many talented people with fixed mindsets regard themselves as special, superior and entitled and they blame others when they do not perform up to scratch or the high expectations of a parent. In sport, John McEnroe is a textbook example of this attitude, which partly resulted from his father's disposition. People who regard themselves as hugely talented are sometimes reluctant to put in the effort of extra training, while athletes with a growth mindset would take this necessity for granted - this gives them the chance to learn and improve.

There are individual chapters on business, relationships, parenting and coaching, with plenty of stimulating examples. In the business chapter, we find that big egos can lead to a host of problems, including a behaviour pattern of pleasing the boss rather than telling him your true opinion. Examples are Lee Iacocca, Ken Lay, Steve Case and Jerry Levin. On the other hand, Jack Welch adjusted his style and therefore achieved far greater success by fostering a culture of growth and teamwork. Across education, parenting and business, the wrong kind of praise - praise of ability rather than effort - leads to a sense of entitlement but at the same time fragility. It is healthier to praise effort than to assume that results come only from intrinsic ability. A growth mindset also leads to healthier relationships where couples can grow together rather than expect things to work out without any effort. Dweck agrees with Tough that the best parenting combines nurturing with challenge. Just as in business, intimidating coaches do not in the long run achieve the best results. The last part of this ground breaking study helps readers to apply the growth mindset to various aspects of their lives, welcoming rather than resisting change. She poses a number of dilemmas and explains how the respective mindsets would respond, and at the end provides a helpful chart summarising the thesis.

One comes away with the conviction that fostering a growth mindset is a hugely important priority.

Neil Hawkes has been working at developing a values-based education for the last 30 years as a teacher, head teacher, local authority administrator and consultant. He is the founder of the Living Values Network, which has affiliates around the world. The book is widely endorsed by influential educators from around the world. It is written very directly with the reader in mind and there are various points to pause and reflect throughout the text. Neil's basic mission is to inspire children and adults to be the best they can be and to adopt a practical living philosophy for life and education. The starting point for values-based education is flourishing and relationships. Neil draws on the work of Nel Noddings, with her moral vision of education as 'nurturing the growth of competent, caring, loving and lovable people' beyond a curriculum based on verbal and mathematical achievement. The reader will notice that both performance and moral virtues are included here. This means that the teacher as role model is critical, especially as their words can either empower or disempower their pupils. Neil emphasises the importance of unconditional positive regard in the development of relational trust.

He defines a value as a principle that guides our thinking and behaviour involving both reflection and practice, especially in positions of leadership. The rest of the book is devoted to an exposition of the ten focuses of values-based education: a focus on the environment, atmosphere and routines, a focus on you, a focus on your relationships, a focus on adopting reflective practices, a focus on ethical vocabulary, a focus on being a role model for values, a focus on school assemblies, a focus on the school's curriculum and its leadership, a focus on community and finally a focus on values assessment. There are plenty of examples drawn from schools around the world and these chapters provide invaluable advice for any principal trying to embed a values-based approach in their schools. There are simple recommendations like the wording of signs, the importance of pausing to be and especially of fostering trust. Many of us suffer from what Neil calls TBD - too busy disorder - stress leading to strains on relationships and consequent misunderstandings.

The responsibility of the leader of the school is primarily for its values, vision, culture, philosophy and practice. It is these that mark out a values-based school in a qualitative fashion. Neil goes further by referring to the development of greater consciousness, which he defines as awareness with a purpose. At the end of each chapter

there are points to ponder and applied to answer situation. This important and inspiring book is a conversation between the author and the reader, but also a conversation of the reader with him or herself. One is left in no doubt of the importance of embracing universal, positive values that transcend specific cultures and are ultimately a contribution that each of us can make. It is a simple but powerful message.

Taken together, these books highlight the importance of developing character in terms of both performance and moral virtues alongside cognitive capacity. Indeed, recent research indicates that schools where character is emphasised are also those where academic attainment is highest. This should not be surprising given the personal qualities required for any outstanding achievement, which is why my own programme focuses on the translation of inspiration into aspiration.

Feeling more Alive

David Lorimer

THE CHARGE

Brendon Burchard

Free Press, 2013, 254 pp., \$26, h/b – ISBN 978-1-4516-6753-0

Brendon Burchard is the founder of the High Performance Academy and one of the top performance trainers in the world. He gives away an enormous amount of great free material, and even sent me a copy of this book for postage only. His story is that he was involved in a serious car accident at the age of 19, as a result of which he asked himself three critical questions: Did I live? Did I love? Did I matter? These are similar questions to others undergoing a life-threatening crisis, but in his case they have become the foundation of a multi-million dollar business helping people share their message and become more authentic in their lives. I have also benefited from his book *The Millionaire Messenger*, which is available as an e-book and on CD. This helps people work out what is unique about their life story and what they can usefully share with others.

This inspiring and empowering book, with its accompanying Web resources, is a tremendous resource to help readers define who and what they are, and how best to move forward in their

lives. Each chapter begins with an arresting coaching story illustrating the appropriate theme and showing how powerful the right question can be when posed at the right time. The structure of the book falls into two parts: first, the five baseline drives for control, competence, congruence, caring and connection; then what he calls the five forward drives of change, challenge, creative expression, contribution and consciousness. The charged life is defined as 'a consciously designed existence that feels evenly engaged, energised and enthusiastic.' The emphasis is on conscious design rather than allowing one's life to unfold by default. Once our basic needs have been satisfied, we need novelty, challenge, connection and expression in order to feel more alive. The three recognisable lives are categorised as the caged life, the comfortable life and finally the charged life as defined above. Too many of us are stuck in the first two categories, and this book shows how we can emerge into the third by making more demands on ourselves.

For instance, the first chapter on control shows how we can choose our outlook and how we react to the things that happen. We can all control the quality of person that we are an everyday basis and focus on being the greatest person we can be given our

special qualities. This is a conscious process and one that thrives on novelty and challenge. Brendon suggests ways of introducing novelty into our lives on a regular basis, which just requires a bit of forward planning. Controlling our workflow is key, and for many of us this means controlling email flow; he defines the inbox as a convenient way of organising other people's agenda, and warns against being taken over by this at the expense of working more strategically. Today, I am prioritising book reviews, and will not be checking my email until much later in the day. This will help keep me on track. Brendon challenges us to undertake reflective exercises as we go along, which can then be applied in everyday situations. Competence includes stretching ourselves and setting new goals, but also reviewing past success.

Congruence is about self-image and self-definition, living into the future and maintaining a positive mood; again Brendon gives the reader tips on how to achieve this. Care includes self-care, feeling safe, worthy and loved, and also maintaining a healthy lifestyle. Connection embraces family and friends, and there is an incredibly useful section

on what Brendon calls growth friends, which enables readers to review the types of friendships they already have and work more consciously to develop these and support our existing friends. I know from my own work with young people that friendship is a top priority, as it also remains throughout life.

The forward drives are about shakeup, the future and being bold; they stretch our limits, encouraging us to learn and grow. One client was able to manage change successfully in his organisation, but not in his personal life. Brendon goes to the edge with his clients, prodding them where it is most uncomfortable but also setting up a constructive relationship that takes them both forward. He encourages us to regard change in terms of gains and also to be very clear and practical about our choices, plans and intentions. Challenges stretch our efforts and abilities, and are fundamentally about the journey rather than the destination. As Jim Rohn says, the importance of goals is the person we become as a result of achieving them. He quotes a speech by Theodore Roosevelt about action and daring greatly. He himself has been setting thirty-day challenges in various areas of his life for the last 15 years.

Stephen Covey writes about the importance of legacy, treated here as contribution. We can both give of ourselves and to others. Brendon's model is investing in and serving people, and he has come to find that much of his giving is what he calls fate funding, depending on the people who cross his path. He also enables people to realise more fully what contribution they are already making, and illustrates this with an inspiring story about an extraordinary bank manager. Finally, there is the drive for consciousness, the area perhaps most familiar to readers of this Review. This is about being conscious of our thoughts, energy, feelings, presence, openness to coincidence, to love, to wonder. By genuinely working through the contents of this highly engaging book, every reader can become more than they already are, enjoying the feeling of being more energised, engaged and enthusiastic; however, this does require commitment, which is the real test. It is all too easy to fall back into our existing patterns.



books in brief

David Lorimer

Note: many of these books are now available in downloadable electronic form

SCIENCE/PHILOSOPHY OF SCIENCE

Brain Bugs

by Dean Buonomano

John Wiley & Sons Ltd 2012, 310 pp., £10.99, p/b.

An authoritative overview of how brain flaws shape our lives by a professor of neurobiology and psychology at UCLA. Much of the vocabulary is technological, hence the reference to the brain as a device or piece of technology when it is in fact an organ – our metaphors are mechanical. The book is highly readable and covers a wide range of phenomena including memory, temporal distortions, fear, and unreasonable reasoning where our opinions are influenced by arbitrary factors. A useful and key phrase is that of associative architecture used by advertisers to create fabricated associations within the brain allied to desirable qualities. As well as being essential for memory, it mediates our susceptibility to psychological manipulation. The distorted sense of time can have a dramatic effect on our financial, health and environmental policies, while fear can cloud our judgement and influence our behaviour in many ways. The situation is made more challenging by the fact that the brain itself acts as an editor and censor in relation to the conscious mind – the author gives a neat demonstration of this by inserting an extra 'the' into a sentence and then pointing it out in the next one! Unreasonable reasoning includes cognitive biases, which the author himself unwittingly demonstrates in his chapter on supernatural bugs. He is quite right that many beliefs are irrational and in the case of Christian Science can lead to unnecessary deaths, but then he lumps together animistic beliefs with telepathy, ghosts and clairvoyance. These arguments should be evidence-based and subject to reason. The last chapter discusses debugging techniques, enabling readers to be more aware of unconscious biases so that we can more easily compensate for our brain bugs. He quotes a Spanish neuroscientist as saying 'as long as the brain is a mystery, the universe – a reflection of the structure of the brain – will also be a mystery.'

The Sense of Being Stared At

by Rupert Sheldrake (SMN)

Park Street Press 2013, 386 pp., \$18.95, p/b.

This is a revised and updated edition of a ground-breaking book published 10 years ago and covering many aspects of what Rupert calls the extended mind. The chapter headings in the book have been reorganised so that the section on the power of attention now comes first, followed by sections on telepathy and remote viewing. The book summarises more than 25 years of scientific research including the recent work that he has been able to carry out as director of the Perrott-Warwick project. This means that he is able to draw on more than 5,000 case histories and 4,000 questionnaire responses involving more than 20,000 people. His thesis is that these powers are in fact a part of our biological nature, and some like telepathy can be proved in animals as well. He puts the whole range of topics within an evolutionary framework, showing persuasively that we need a hypothesis of mind extended beyond the brain and that many subtle communications are mediated by the invisible connections represented by what he calls morphic fields. The result is an authoritative and up-to-date description of research across a wide range of areas. Essential reading for those who missed the first edition, and for those who did read it at the time, much new research is reported, including recent experiments with phone and text telepathy.

Scientism

by John Cowburn SJ

Alban Books Ltd 2013, 162 pp., £16.99, p/b.

This is a comprehensive introduction to scientism, from both a historical and philosophical point of view. The author, a Jesuit philosopher, defines scientism as 'the belief that science can explain and do everything and that nothing else can explain or do anything: it is the belief that science and reason, or scientific and rational, are co-extensive terms.' More concisely, it is the belief that only scientific knowledge is valid. Physics is given pride of place and the world is thought to be value free. This work explains the origin of the term and the influence of scientism in various fields before moving on to a philosophical history. In modern times, E.O. Wilson has been a central proponent of the scientific view with his book *Consilience*. Various chapters explore determinism and responsibility, values and morality, criminal justice and the history of scientific psychology. There is also a long chapter on eugenics and on the scientism and religion. The author makes it clear that he is not anti-science, but is questioning the adequacy of a scientific approach to reality. In the final chapter, he describes levels of reality and the nature of scientific reduction, including that science is indeed not the only valid or rational kind of human knowledge and that great scientists are not necessarily paragons of wisdom. He also observes that determinism and the argument that the world is value free are in fact circular propositions that advocates do not seriously ascribe to themselves. This is a thorough coverage of a significant field.

MEDICINE/HEALTH

Inside an Autistic World

by Wolfgang Weirauch

Temple Lodge Publishing 2013, 204 pp., £12.99, p/b.

Subtitled 'spiritual experiences of people with autism', this extraordinary book recounts the development and memories of three autistic individuals through a technique called Facilitated Communication. Two of the individuals – Erik and Andreas – are twins and the conversation takes place with their mother, Hilke. If one is to believe Erik's account, he was an anthroposophist in his previous 20th century incarnation and died at Bergen-Belsen as a result of torture for having hidden Jewish friends. This experience apparently made him extremely reluctant to incarnate and goes a long way to explaining his present condition when he did not initially wish to speak. The descriptions of his experiences are graphic and disturbing, but they are redeemed by his perception and understanding of Christ, who apparently persuaded him to incarnate and continue the process of human evolution. He describes the Nazi period as one of the darkest and explains that the guards and torturers would have had to experience what it is like to be on the receiving end of their treatment in their life review. This scarcely bears thinking about, especially as these same guards were driven by fear that they themselves would be killed if they failed to follow orders. It turns out that the third character, Martin, remembers being a guard at Dachau and being compelled to carry out appalling orders. All this is explained within the framework of Rudolf Steiner's philosophy of evil involving Ahriman. The reader gains a further important insight into the inner condition of autistic people and realises that they have in many cases an exquisite sensitivity and concern with spiritual development; they may also have clairvoyant abilities and the capacity to communicate with nature spirits. It seems that the distinction normally drawn between inner and outer is different for these individuals. This is certainly an eye-opening book.