

book reviews

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science-philosophy of science

Rock Stars from Deep Time

Martin Lockley

THE STAR-CROSSED STONE: THE SECRET LIFE, MYTHS AND HISTORY OF A FASCINATING FOSSIL

Kenneth J. McNamara

University of Chicago Press, 2011, h/b, \$27.50 - ISBN 978-0-226-51469-7

The main protagonists in this book about 'fascinating fossils' are several dozen species of sea urchin, some around 100 million years old. *Urchin* from the Latin *erictus*, meaning hedgehog was once used to describe elves and fairies and, of course, is still applied to mischievous boys (little ones). (Interestingly the hedgehog – an insectivore – is more closely related to primates than to most other mammals). For those not well-versed in the anatomy and evolution of sea urchins, they have archetypal star shaped, pentagonal or penta-radial symmetry and according to some specialists may represent our closest relatives among the invertebrates. They exhibit archetypal circular or spherical shapes and some (heart urchins) have striking heart shaped anatomy. All this suggests that the lowly urchin resonates deeply on an archetypal, symbolic and evolutionary level. They are quite literally rock stars from deep time.

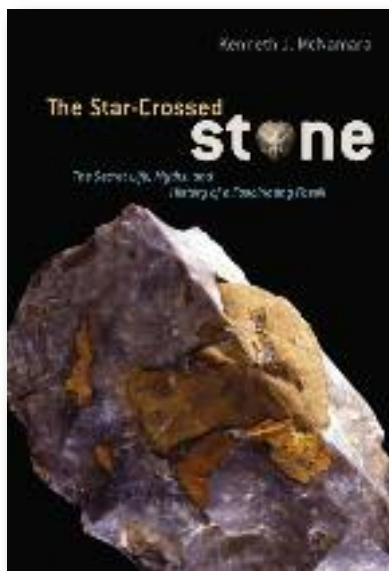
It is in the good old English chalk, which is Cretaceous in age, dating to the age of dinosaurs, that Ken McNamara, now a paleontologist at Cambridge University, did some of his early boyhood urchin collecting, exercising what he describes as 'a strange, secret passion for these fossil sea urchins.' (*Creta* incidentally is Latin for chalk). The chalk heart urchins and others labelled as 'button stones' and 'helmet stones' have their original calcareous skeletons (known as 'tests') completely replaced by flint. This makes them extremely resistant so that over time they weather out of the

soft chalk in countless numbers, showing up in ploughed fields, streams and on beaches. Although, the Swiss naturalist Conrad Gesner illustrated the first fossil urchin in 1565, there is abundant evidence that the strange passion for urchin collecting goes back deep into prehistory. It is well known that Neolithic flint mining became a major industry in many areas where chalk bedrock was accessible. Flint mines, some with very extensive galleries and shafts are found in England (Grimes Graves), France, Belgium, Holland, Poland and elsewhere. As a result archaeologists periodically find flint tools (scrapers and hand axes) with embedded urchins. One of these, a particularly aesthetic example from Swanscombe, Kent, dates back even further into the Early Palaeolithic or 'Old Stone Age,' and appears it was left unfinished in order to preserve the urchin. McNamara speculates on how our early Swanscombe ancestor [little removed from *Homo erectus*, but precursor to the Archbishop of Canterbury and various Cambridge professors] might have acquired this fascinating fossil. Did the individual who shaped this artefact 'select this flint simply because of the fossil urchin?' Other researchers are in no doubt: the urchin was 'evidently intended to be the central feature of the hand axe.' If this is true it speaks to 'a nascent aesthetic sensibility' emerging nearly a half million years ago, in England no less! [I say this to

poke fun at archaic nationalistic traditions in archaeology that claim innovations originated with 'our' ancestors rather than 'theirs']. Clearly a half million B.C.E was long before the 30,000-year-old flowering of cave art traditionally taken as the first undisputed manifestation of artistic creativity.

McNamara's exposition on the fascinating symbology of urchins is based on his long involvement in the scholarly paleontological study of fossil urchins in their own right, and the archaeological study of their significance at sites all across the Middle East and Europe. For example, he recounts and cites his work in Jordan, where, as in other regions of the eastern Mediterranean and North Africa perforated sea urchins have been found at many Neolithic sites, dating back to ~9000 BCE. These include small marble-sized urchins, also from the age of dinosaurs, that have been very deliberately and delicately perforated through a complex central 'disk' that forms a central part of their topside anatomy. McNamara cannot resist calling them Holy urchins. Although they might have been mere ornamental beads, as McNamara suggests, long before Leonardo da Vinci made the symbol explicit, these Neolithic craftsmen may have recognised something resembling the pentagonal form of the Vitruvian man, framed in a perfect circle. If this is the case, the perforation coincides with the location of the genital organs. The Pythagoreans also had great regard for pentagonal symmetry, termed 'pentalphic,' as it symbolised health and balance. Thus, the symbol, which some Greek scholars consider of older origin denotes health and of course fertility.

Another most-striking example of a cherished urchin comes from Egypt. The urchin itself is 40 million years old, but around the time of the Twelfth Dynasty, (ca., 2000 BCE), someone found it and engraved it with a dozen hieroglyphs indicating it was 'found in the south of the quarry of Sopdu by the god's father Tja-nefer.' It was found by an Italian archaeologist at Heliopolis between 1903 and 1906 and deciphered in 1947. Who the priest Tja-Nefer was, and what significance he (?she) attached to the urchin is unknown.



Was the find 'ordained by the stars?' Or was Tja-Nefer 'just another in a long line of eccentric fossil urchin collectors?' The Egyptians believed one could be reborn as a star and as early as 4000 BCE the five pointed variety had special significance in much funerary artwork depicting the pharaohs. Did the number five relate to the five sacred 'epagomenal' days (god's birthdays) left over after reckoning a 360 day year (divided into 12, 30 day months)? Perhaps: alone the five pointed symbol means star, but when combined with other hieroglyphs they relate to time.

A Bronze age burial on Dunstable Downs, from about the same time as the early Egyptian dynasties, revealed a skeleton of mother (nicknamed Maud) and child associated with hundreds of sea urchins. Such funerary urchins also show up in various Iron Age tombs. No doubt most readers would like to know the 'real meaning' such symbols had for our various ancestors. We may be on the right track with the well-studied Egyptians, but in the context of other cultures the likely meaning, remains intriguing but inherently uncertain. Urchins likely had symbolic and/or aesthetic meaning related to metaphysical themes of mortality and immortality. As McNamara notes the meaning attached to urchins collected in more recent times can draw on various surviving oral traditions. They have been called thunderstones, said to avert natural threats and disasters (thunderbolts, trolls, witches), and Thor is sometimes depicted with a crown of stars overhead. [Rather predictably, spark-inducing flints have long been called thunderbolts]. The terms 'Shepherd's Crown' and 'Fairy Loaf' still survive and were widely used in comparatively recent times, as were terms like 'sheep's heart' and 'snakes eggs.' They were said to keep away the devil, stop pixies from stealing milk, or simply to keep milk and other products from spoiling. Such charms were most efficacious if kept on window sills around the house. In some places dozens of urchins have been built into the frames of windows and gateways leading to medieval and more recent churches.

It seems five pointed star-crossed stones are more than mere curiosities filling the dusty cabinets of palaeontologists. They are highly distinctive natural objects that present themselves in convenient, aesthetic and portable form. They symbolise the stars that stud the heavenly firmament and have been used to stud the tombs of pharaohs and other departed ancestors. So it seems the lowly urchin is literally a

deep time 'rock star' among fossils, stirring our intimations of immortality, and connecting us to the cosmos, perennially for hundreds of millions of years. It is extraordinary that these cosmic symbols not only resonate deeply with our comparatively young species, but seem even to have attracted the attention of our evolutionary ancestors.

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The Gene Delusion

Edward James

THE SOLITARY SELF: DARWIN AND THE SELFISH GENE

Mary Midgley (SMN)

Acumen, 2010, 176 pp., £12.99, p/b
- ISBN: 978-1-84465-253-2

WHAT DARWIN GOT WRONG

Gerry Fodor and

Massimo Piatelli-Palmarini

Profile Books, 2011, £9.99, 292 pp., p/b - ISBN: 978 1 84668 221 6

Mary Midgley and Gerry Fodor are both renowned philosophers, but both are also deeply concerned with the constructs and procedures of Natural Science as they are understood both by practitioners and non-specialists alike. The principal focus of both books is a concern with the way in which the views of Richard Dawkins and the school of Neo-Darwinist followers seem to have taken over the public view of what Science stands for.

Neo-Darwinist (ND) is a term for those who seem to claim that Darwin advocated 'natural selection' as the sole functioning process in evolution. Adaptationist is another descriptor. Darwin's own writings refute this viewpoint.

Mary Midgley trawls the original writings of Charles Darwin to show how the reductive individualism that Dawkins now presents as Darwinism does not derive from Darwin but was clearly described by Thomas Hobbes in the early days of the Enlightenment. A life of total independence and self-interest, argues Midgley, is not a realistic aim for *Homo sapiens*. The *Selfish Gene* idea, that all life is simply a conflict between individuals, is not seen in Nature. In fact, Darwin states clearly that humans, just like all other animals, are designed to

interact with one another and with the complex ecosystems of which we are a tiny part. The bonds of dependence are lifelines to continued existence, not just tedious restraints on the reality of independent life.

Midgley then analyses the Neo-Darwinist arguments and demonstrates that they do not satisfy even the logical rules which they are supposed solely to depend on. She also sketches the development of Hobbesian thought, which was in the beginning meant to be satirical, through to the sadly limited views of Nietzsche, which relate closely to the selfish gene idea. And they led the obsessive Nietzsche only to existential loneliness. We all need healthy individuality and connection with community.

Gerry Fodor's title, 'What Darwin got Wrong' may be incorrect, since Darwin actually spoke firmly against Natural Selection as the only force in evolution, but the rest of the book provides a solid refutation of Neo-Darwinism. Fodor places B.F. Skinner's learning theory of the 50s beside Dawkins' thesis, and shows a close correspondence. But Skinner has long been found wanting, and those reasons apply equally to ND. Fodor also quotes from a rich variety of recent work in biology to provide counter-examples to Dawkins' oversimplifications. He then moves into detail and queries the cognitive logic of the ND view. Evolution is many-levelled, there is not one level of explanation, and there can be no general theory: 'selection for' is never satisfactorily defined. And using 'fittest' without specifying a time scale is meaningless. All in all, a very rough job.

In my view, both books do an efficient hatchet job on Dawkins and the views of related Neo-Darwinists. But both books also discuss much wider concerns relevant to our Network. The type of argument advanced by the Neo-Darwinists has been debated by philosophers for a long time, and has been dispatched, but this has not reached the attention of the public nor of scientists in general.

Essentially the NDs adopt the thought processes of the 'hard' sciences, that is, progress through constructing a theory (model), and then searching for proof of the predictions of that theory in the real world. And the NDs, among others, try to impose this rather limited process on the life sciences, and even on the whole of human endeavour.

The fundamental method of this (untrue) ideal of 'scientific' research is always the same. A real-world

situation is modelled in a greatly simplified form, expressed in mathematical terms. The model is investigated by rational/logical processes and some implications are worked out. The implications in the model are then transferred back and interpreted into the real-world situation. Fodor shows in detail why this method is not valid in the vastly more complex world of life forms.

Contrary to Dawkins, other informed biologists such as Steven Rose argue that life depends on the elaborate web of interactions that occur within cells, organisms, and ecosystems, and in which DNA has but one part to play. Fodor's book also provides the rare opportunity to read the reviews of previous editions in the present book and to see the author's replies to many of their criticisms.

Both Midgley and Fodor no doubt hoped to spark off a serious discussion of their views. But on reading reviews by Neo-Darwinists, I find that the NDs are so strongly committed to a belief in their own version of Natural Selection that there is little chance of this. It proves difficult to find on the Web any serious discussion of either book, or even of the different viewpoints. Comments are generally limited to simplistic abuse and the denying of any understanding to the other side. I have looked at the published views of several principal 'researchers' in this area, which are hostile in a similar way.

In fact, many NDs have got mixed up with Dawkins other crusade, the promotion of atheism, whatever that may mean. He believes so much in his own superb rhetoric that he transfers his own reductionist beliefs to every area of human endeavour: philosophy, religion, ethics. I can appreciate why the NDs are angry. Many have built whole careers in academia on Dawkins' sandy foundation, and it is hardly surprising that they should get touchy when tides of criticism are about. Cold water is not good for their own foundations either. But in fact, many of their complaints against Fodor are quoted and answered in his book.

Strangely, I believe that Dawkins and other Neo-Darwinists are in fact deeply religious in a fairly primitive sense. They invoke magic frequently. Genes are the unquestioned Words of their God, and their first commandment is 'The gene is our God, and there is none other' However, while denying any purpose in creation, they themselves write with an all-compelling purpose, to promote the truth of their story. And they rely on their so-called rational arguments as the only way of proving

anything. But as we have already discussed, this requires the unquestioning acceptance of the rules of logic, and then the belief that a transfer of these results from their simple mathematical logic model should remain 'true' in the vastly more complex real world. We know that this is hardly likely.

And finally, a strange situation. From his own teachings, it appears that Dawkins the person and each of his followers must not be accused over any of the theories appearing under their names. As Dawkins says, we can dance only to the tune of our genes. So it is not the Neo-Darwinists speaking, nor even 'the beer', but their genes only. How sad, as such independent champions of unfettered truth, to have forced themselves into such a limited and meaningless role.

NOTES:

See <http://whyevolutionistrue.wordpress.com/> for a crusading coverage of the triumphs of the troops for Neo-Darwinism.

For a book review see http://scienceblogs.com/pharyngula/2008/10/why_evolution_is_true.php

For a blog by a true believer, see <http://www.ngasal.com/4531/why-evolution-is-true-by-jerry-coyne-aa-1-2009.html#>

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Psychologists who Misunderstand Evolution

Martin Lockley

GETTING DARWIN WRONG: WHY EVOLUTIONARY PSYCHOLOGY WON'T WORK

Brendan Wallace

Imprint Academic, 2010, 187pp., £14.95 p/b
- ISBN 978-1-84540-207-5

Although evolutionary psychology (EP) was only 'announced to the world' as a discipline in 1992, this 'extremely modern science' (if it can be called a science) has many precursors, going back to Plato. In *Getting Darwin Wrong* psychologist Brendan Wallace does a thorough job of showing the many influences leading to the discipline. He also shows the weaknesses of a field based on the assumptions of its proponents rather than any new 'discoveries.' Contrary to popular opinion, EP is not the



adaptation of Darwinism to psychology. Rather it is the adaptation of cognitivism ('information processing' and 'computational' theories) to the field of evolution. In short, its proponents believe the mind/brain functions in a modular way like a digital computer or Turing Machine, which 'in theory' mimics the cognitive abilities of humans. If wrong, as Wallace claims, EP 'could not be true and its relation to Darwinism is irrelevant' (original emphasis). For similar reason (EPers are not biologists) EP does not derive from the largely discredited field of Sociobiology (which looks for matches between modern behaviour and evolution that supposedly maximise 'fitness'). Instead EP claims the mind is adapted (hard-wired) to the environment we lived in back in the Ice age. Thus EP, like cognitivism, believes in fixed, internal cognitive states or structures that differ from the more fluid and plastic modes that allow the more flexible adaptive responses to the environment proposed by behaviourist (and sociobiologists), with which the EP crowd disagree on principle. [I take this to mean, rather surprisingly, that EP sees little historical evidence for human cognitive advance since Palaeolithic times. While one might feel this way when dealing with some rather disagreeable individuals!, the cultural evidence suggests otherwise].

Steven Pinker (Harvard) is most often cited (and admonished) as the spokesman for EP. His rather entrenched cognitivist position is that the mind operates reductionistically, using modular 'pre-installed mental apparatus,' rather than as a flexible, holistic, general-purpose organ more suitable to probabilistic (statistical/stochastic) analysis. Wallace repeats this often, but allows there that may

be at least one specific modular algorithm in the brain/mind that works. This is Chomsky's Language Acquisition Device (LAD) which Wallace considers the most convincing example yet proposed on the basis of actual analysis. The LAD suggests that a Universal Grammar seems to operate independent of nurture and environment. Such notions helped promote a 'cognitive revolution' in the 1960s, further fuelled by interest in Artificial Intelligence (AI) and Information Processing Theory.

However, looking into the historical influences affecting cognitivism and EP (which Wallace does with great thoroughness) we can trace back the notion that the mind operates according to intrinsic rules to 17th century rationalism (Descartes) and ultimately to Plato and mathematical ideals. Thus, notions of natural and mathematical law are, at least to some extent, a holdover from Platonic metaphysics and Pythagorean mathematical mysticism. Cognitivism and EP essentially represent a new type of phrenology (!) in which each bit of the brain/mind has a pre-determined function. This tradition is also responsible for the perennial problem of subject-object and qualitative-quantitative dualism which has deeply affected modern scientific thinking. (I suggest we also consider the rise of robust self-consciousness in this regard).

Cognitivist/EP theories raise the problematic specter of the *Homunculus*, the little man 'in the head,' who makes sure algorithm rules are obeyed. Unfortunately the *Homunculus* needs its own little *Homunculus* to make programs run smoothly and so on down the path of infinite regress. Philosophers may think the *Homunculus* silly, but 's/he' plays a big role in computer programming where subroutines take on the role of algorithm 'monitors' and 'supervisors.' The main EP flaw seems to be that it simply *assumes*, without evidence, that the brain/mind operates like a digital computer. Although this allows EP to brand its opponents as anti-science and anti-evolution Wallace and others see through the ruse. Alternative approaches such as 'Ecological Psychology' tell us 'we don't have to 'internally represent' the world [to ourselves] because we already have a representation... in front of our noses. It is called...the world.' We react directly to the world, and not through algorithm processing subroutines in the mind.

Why does EP hold that we (our brains) operate on pre-installed programmes rather than by evolutionary-flexible adaptation to our

complex changing world? And why does EP still reject more general purpose learning models, preferring those that espouse rigid modular programmes purportedly evolved in the Ice Age and earlier? By the end of the book Wallace convinces us that EP has got Darwin and Darwinism seriously wrong in its 'reactionary attempt to patch up 20th century Cognitivist orthodoxy.' Many trends in contemporary psychology, especially those dealing with 'enactivism,' and the embodied mind, show the brain to be far more flexible than the EP paradigm allows. (See **Network 103**, for review of Alva Noë's new book). EP is, or has already crumbled, along with AI and the high hopes invested in it. Replacing EP and cognitivism are ideas about 'distributed' cognition (enactivism and the embodied mind) and 'Activity Theory,' which holds that we learn language (inner monologue) from exposure to external social dialog. Likewise 'Situated Cognition' shows how much we are influenced by the milieu of our environments: thus the pendulum swings back towards behaviourism.

Wallace pulls no punches in his final conclusion that 'cognitivist orthodoxy' must be 'overthrown' in order to relegate EP to 'a footnote' in the history of psychology, and so make way for a 'genuine Evolutionary Psychology.' [Personally I have always had considerable doubts about the EP message, and so share Wallace's similar misgivings]. One strength of the book is that it reviews the rise and fall of EP in a very helpful and cogent historical context, giving useful background on how other 20th century disciplines have given psychologists, philosophers and evolutionary theorists food for thought. Wallace's expositions are in places rather dense, but mostly this reflects his need to 'explain' the intricacies of other convoluted theories, some of which are presented with the help of extensive quotations. In such cases, he unpacks the verbiage in some detail, and often repeats and summarises his expositions to drive important points home. His expositions are nothing if not thorough. My only quibble is that the book contains a rather surprising number of unnecessary typographical errors.

In conclusion, it seems that what Daniel Dennett called *Darwin's Dangerous Idea* has resulted in a number of dangerous (i.e., wrong) spin offs, which make little or no evolutionary sense. As we know from Piaget and others cognition develops or 'evolves' during ontogeny, just as mind/consciousness has evidently evolved during the evolution of our

species (*Homo sapiens*) and our ancestors. Thus, as Wallace says, there is room for a genuine Evolutionary Psychology, or evolutionary Theory of Mind. The problem seems to be that no one has yet formulated one that the mainstream of psychology finds convincing. Until then psychologists are likely to continue misunderstanding and misapplying evolutionary principles.

medicine-health

And Never the Twain Shall Meet?

Beata Bishop

THE HEALING JOURNEY

Alastair J. Cunningham

Healing Journey Books 2010, 181 pp., \$19.95, p/b – ISBN 978-0-9565252-0-8

THE NUTRITIONAL THERAPY OF CANCER

Dr Lawrence Plaskett

Published by the author 2010, 246 pp., p/b – ISBN 5-800040-965438

The subject of cancer medicine crops up regularly in the media, as a rule heralding a new wonder drug, promising treatment or genetic discovery (which then is never heard of again), but recently the tone of such articles has changed. A while ago a commentator began his piece in *The Times* with this sentence: 'The great aim of modern cancer treatment is not necessarily to cure patients but to allow people to die with their tumours and not because of them.' More recently, a long article by an oncologist appeared in the *Guardian* under the title, 'Should we stop trying to cure cancer?' His conclusion was that as half of all men and one third of all women are likely to develop cancer, having the disease should be regarded as 'normal' – meaning, presumably, that not to have it would count as 'abnormal', according to the rules of Orwellian double-speak. This is certainly a change from the gung-ho, any-minute-now-we'll-beat-cancer stance of the past several decades.

Meanwhile from the CAM – Complementary and Alternative Medicine – side of the cancer jungle new communications arrive, such as the two books under review here. Prof. Cunningham represents the psychological approach, Lawrence Plaskett the nutritional method to heal cancer, and between them they set up a neat polarity.

This is the third, revised British edition of Canadian-born Alastair Cunningham's book, 'Healing Journey – Overcoming the Crisis of Cancer', first published 19 years ago in Toronto. The author, himself a recovered cancer patient, is an eminent biologist who in mid-career branched out into clinical psychology and used both disciplines in working out a self-help programme for sufferers. His main aim is to help them cope better with the psychological and physical ravages of both the disease and the treatments, e.g. chemotherapy. He is critical of available medical treatments which he describes as largely ineffective and often harmful to the patient. But he is even more sharply dismissive of nutritional and dietary therapies, while admitting that he knows very little about them; this brings him uncomfortably close to those allopathic doctors who reject *his* method without understanding it. At the same time he naively asks why establishment medicine suppresses all other approaches. Is Professor Cunningham not aware of the financial side of the cancer industry?

The main theme of the book is 'healing from within', helping the patient to find meaning in the disease itself and, more widely, in his or her own life. It offers tools for stress release, for re-programming negative inner attitudes and discovering the spiritual dimension within. All this is pretty familiar, but it can act as a lifeline for the newly diagnosed, terrified patient, desperate for psychological support. Having worked with cancer patients myself for twenty-plus years, I know what a big improvement a psychological re-orientation can bring, even on the physical level. To quote Prof. Cunningham, 'Healing and curing are not the same. Healing can take place whether or not the cancer is cured, and can also take place towards the end of life. The focus is on helping people improve their quality of life at any stage of their cancer journey.'

After this lucid, well-organised work Lawrence Plaskett's book seems to me a tragically wasted opportunity. As a biochemist, practitioner of nutritional, herbal and homeopathic medicine, the author is enormously knowledgeable, but doesn't know how to communicate his knowledge. For one thing, the text is bristling with crude mis-spellings, repetitions (one statement occurs 3 times in 8 lines), 'principle' and 'principal' are having identity problems and get it mostly wrong, while singular and plural are often confused. Toxins are detoxified and contributions are contributed. The poor quality of the writing makes

reading a chore. A professional editor might have turned this work into a winner, besides slimming it down by half. Alas, no such person was at hand.

Dr Plaskett makes some important points, but they are hidden in acres of verbose text. He rightly deplores that post-operative cancer patients get no help to improve their condition and prevent a recurrence of the disease; he gives a fine, dispassionate critique of orthodox treatments and contrasts them with the naturopathic approach, and he points out the importance of nutrient supplementation to children and delinquents, which has already proven to improve the behaviour of both groups. All this is valid and essential information, but hard to find without reading every line of the text.

And what about Dr Plaskett's therapy? He advocates an organic plant-based diet, the exclusion of animal protein, fat and a range of undesirable foods, he emphasises the importance of detoxification by means of coffee enemas and castor oil treatment – all of which are components of the long established, well documented Gerson Therapy. Yet Dr Max Gerson, M.D., is first mentioned on P:187 and then only in a condescending way as a forerunner of Plaskett's own approach, which smacks of arrogance spiced with hubris. If the author had improved or expanded Dr Gerson's work, all would be well. Instead, he only produces a confusing, imprecise 'protocol' which few, if any, patients could possibly understand and apply. Having worked my way through the full Gerson therapy over two years, I know what a scientifically constructed, rational nutrition-based protocol is like - and it's certainly very different from this one.

Lawrence Plaskett's work deserves better than this amateurish, topsyturvy book. I hope he will get together with an experienced, medically qualified editor and produce a really useful work on the nutritional therapy of cancer. It would fill an enormous gap and perhaps help to infuse new ideas into mainstream cancer medicine.

What I should also like to see is a book presenting all the best, properly tested inner and outer approaches, adding up to a truly holistic new-style cancer therapy. At present the CAM camp seems as divided and as specialised as any allopathic discipline. Prof. Cunningham rejects out of hand the enormous healing potential of nutritional therapy, while Dr Plaskett totally ignores the role of the psyche in sickness and health. Yet cancer is a systemic disease that affects both body and mind and has

to be healed on both levels. Combining organic broccoli with a re-programmed positive *Weltanschauung* would be a promising first step.

Beata Bishop is a psychotherapist, writer and lecturer. Her book, 'A Time to Heal', has been translated into eight languages, including Korean.

The Life Cycle of Healing

Eleanor Stoneham

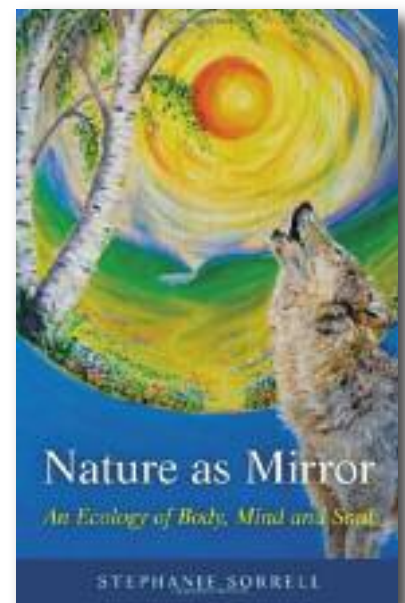
NATURE AS MIRROR: AN ECOLOGY OF BODY, MIND AND SOUL

Stephanie Sorrell

0 Books, 2011, 185 pp., £10.99, p/b
- ISBN 978-1846944017

The idea behind this book is that nature is a mirror, reflecting back at us our own soul, the fractures and chasms within our own psyche. If we can understand this, then nature also becomes a powerful healing tool, our teacher as well as our provider. This is a handbook to help us use nature's own natural cycles and patterns to heal our own souls. Also, unless and until we develop an intimate sense of our union with nature, the deep ecology of Arne Naess, we will continue to work against the natural environment, with all that this implies in environmental destruction. If we do not heal our relationship with nature it will destroy us.

In astrology and dream symbolism water represents the soul and emotions. By trying to control water levels we 'tamp down' our own souls. We cannot heal our own dis-ease and sickness until we understand that what we do to the earth we ultimately do to ourselves. The world's soul fights back.



during the writing of the book. She dreamt she went to heaven to see that which had shaped her and found that God was a tree. The material world exiles nature as our greatest teacher, but reconnection with nature brings us back in touch with presence, God or spirituality. This book provides the cyclical template to help us find our own healed and healing place within the biosphere.

Spirituality for the Healthy Minded

Isabel Clarke

THE PSYCHOLOGY OF SPIRITUALITY

Larry Culliford (SMN)

Jessica Kingsley, 2010, 256 pp.,
£14.99, p/b –
ISBN 978-1-84905-0043

This book is well structured and easy to read. It sorts its material effortlessly into straightforward categories and carries the reader painlessly along. Each chapter concludes with a helpful summary and exercises to enable the reader to incorporate its teachings into their life. It is in places delightfully illustrated with both personal and clinical anecdote, and with some examples from published sources such as Barack Obama's life. The chapter on the author's own teaching programme for medical students using a refreshingly simple and effective approach to taking a spiritual history was particularly welcome – I only wish such a programme were universally in evidence!

The content is organised around a modified version of Fowler's stages of faith used by Culliford to track a universally applicable path towards spiritual maturity. The scene is set in Part 1, and Part 2 takes us through the stages in order, starting with a chapter on children's spirituality, an area I know too little about, illustrated by an interesting study by Adams, Hyde and Woolley. In Part 3, entitled Remedies, we are recommended means to follow this path of spiritual development, for instance, meditation, which is introduced with a usefully down to earth focus.

The argument is positive and all encompassing, and contains many good features. Why do I find it so unconvincing? Of course, as a psychologist, I do have a problem with the word 'psychology' in the title, as there is little here that I would recognise as such. References to psychologists are venerable or obscure, and methodologically

And because trees maintain the planet's water cycles, and have a clearly cyclical pattern of life, it is fitting that Sorrell uses the powerful imagery of the tree to explain our own journey of healing at a psycho-spiritual level. The tree becomes a model, a template, as it journeys through its own seasons and cycle. She explains in detail how these can be used as a mirror of our own inner and outer processes, as a living map for our own soul journeys. In separate chapters she describes the various processes in the natural cycle of nature, of rebirth, blossoming, ripening, the stripping of autumn or fall, and so into the 'long wait' of the dark of winter, always relating these to our own journey of spiritual development and healing. Encapsulated within the 'long wait' is the wilderness, to which four chapters are devoted. Here is the greatest opportunity for soul work, often with the need for spiritual guidance, about which the outside material world can be most negative. Within this wilderness experience Sorrell describes the three vital strands of reflection, contemplation and aspiration. Time for reflection is one of the greatest losses of our time. It integrates past with present, and helps the synthesis of heart, mind, spirit and soul. It should be an integral part of our daily routine. Reflection should be followed by contemplation, perhaps through holding an object, letting our senses interact with it, being receptive to what it has to offer, allowing a stream of consciousness that can heal, enrich and enlighten. The final strand within the wilderness is aspiration. We all need visions and goals; we all need to aspire to the highest we can reach. Our un-lived life has a powerful hold on us and feeling unfulfilled feeds our anxiety of death. Gaining wisdom through this threefold process in the wilderness, we learn the art of just 'being', we come to know where we are in our own inner creative process, but we can also use this wisdom in the world to help others. And so we go back to our rebirth as the cycle starts again.

But before we can enter this cycle in the first place, we need to find our own inner place of healing, our own inner light. Everything needed for sustaining our existence is within us, but we gather stuff around us to which we become attached. We are spiritual beings having an earthly experience, not the other way around. We need to find again our heart centre, our own rooted-ness.

Psychologists understand the importance of 'authentic mirroring' in childhood development. Sorrell describes her own lack of parental

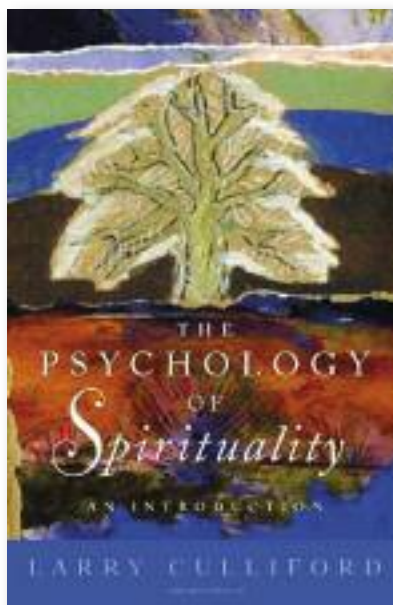
mirroring and uses her own resultant struggles of soul and spirit and mind, her unconscious painful feelings as they are mirrored back at her from nature, to lend support to her ideas throughout the book. Whilst this is a very personal account of Sorrell's own psycho-spiritual healing journey it is definitely not 'misery memoir'. Rather she is able to share and empathise with the reader through sensitive and perceptive observations how her own experiences with nature have helped her make sense of her own often painful journey, using the powerful metaphor of the tree (and sometimes the acorn and apple). I for one through my own life struggles found that I could readily relate to much of what she says. This will be a useful tool for psychotherapists to share and work through with their patients.

This is also a practical book, as each stage in the cyclical healing process is supported with simple exercises of reflection, meditation and visualisation. Some of these need daily practice; those to help us just 'be' need practising several times a day. In addition Sorrell encourages the use of writing, drawing and colouring after these exercises to ground the insights obtained.

I liked the rich metaphorical treatment. By understanding the different stages of our mental pain within the context of the natural cycle of the life of the tree, we are able to live through those stages and anticipate the next stage of the healing cycle more readily, less painfully.

It is a pity that the copy-editing has let this book down somewhat but this should not be allowed to detract from the perception and value of the message imparted. Errors can be corrected in the next edition.

The book closes with a fascinating transcript of a dream the author had



empirical grounding is thin, with heavy reliance on classifications, systems and plausibility. But that is just a psychologist's quibble, and for an avowedly popular work, a minor problem. Why am I not then swept along by Culliford's cheerful confidence and ebullience, by the sheer symmetry of all those stages and classifications? I read on and suddenly I am happy. I have encountered William James, a psychologist I both recognise and revere (albeit vintage, 1902) and better still, recall that his work, *The Varieties of Religious Experience*, holds the key to my malaise.

James (1902) makes this wonderful distinction between the religion of the healthy minded, the 'once born', and the more morbid, sick soul, the 'twice born'. When I first read this as a gloomy teenager, clinging to Dostoevski and Schubert's *Winterreise* while my contemporaries bopped to the Beatles, 'twice born' spelt instant recognition. And it is not all bad news – twice born happiness, though arising out of radical pessimism, is all the sharper for it. (James, *Lectures IV – VII*).

The missing dimension in Culliford's book was revealed, and it fits. There is a section on mystical experience, but nothing here about the different quality of that experience. No hint of the Dark Night of the Soul, or the sort of spiritual dangers that very properly exercise the mystical writers. The shadow is conveniently swept into the 'pathology' bin, leaving the way clear for healthy minded spirituality. There is barely a mention of the concept of spiritual emergency and the likes of Grof (Grof 1990) and Lukoff (1985) do not figure.

This one sided perspective is smoothly achieved by the way in which spirituality is defined in order to leave no room for the discordant. The actual definitions, e.g. 'spirituality concerns wholeness and unification of opposites' p. 204, are unexceptionable. It is what they assume and what they exclude that is significant. The spiritual values listed on p.114 remind me of the virtues in a medieval psychomachia. Spiritual means good. Similarly, the developmental path so confidently laid out goes in one direction – towards greater individuality (admittedly with a consciousness of connectedness), e.g. 'meditation allows a person a new, individual, perspective, liberated from the attachments formed by years of conditioning' p. 211. Working in the NHS where cultural awareness is one of the great drivers behind recognition of the value of spirituality, this sits uneasily as a very Western perspective. I suppose the

assumption that bothers me is that this Buddhist tinged, individualistic creed must be universally applicable. What about family and community loyalty? What about Abrahamic zeal for justice, the rebel in me asks?

However, this does not take away from the charms of this eminently accessible book; it is simply necessary to recognise its limitations. For instance, in the context of the contemporary NHS it feels out of date. It fails to mention the Recovery Approach (e.g. see Shepherd, Boardman, & Slade, 2008), that other great Trojan Horse for getting spirituality onto the agenda along with cultural awareness, and does not reflect the huge impact that the introduction of mindfulness is having, even in the most acute and chronic settings. To understand this phenomenon, a clearer distinction between therapeutically applied mindfulness and meditation than available in the book is necessary.

In conclusion, I can unreservedly recommend this book to all healthily-minded, spiritually inclined people – only not to miscreants like myself!

Grof, C, Grof, S, (1990) *The Stormy Search for the Self: Understanding and Living with Spiritual Emergency*. Los Angeles: Jeremy P Tarcher.

James, W, (1902). *The Varieties of Religious Experience*. New York, Longmans.

Lukoff, D, (1985) The diagnosis of mystical experiences with psychotic features. *Journal of Transpersonal Psychology*. 17(2), 155 - 81.

Shepherd, G., Boardman, J., & Slade, M. (2008). *Making Recovery a Reality*. London: Sainsbury Centre for Mental Health.

Isabel Clarke's latest book, Psychosis and Spirituality: consolidating the new paradigm. Chichester: Wiley, came out in 2010

More Light, Still Some Heat

Peter Mansfield

THE CASE AGAINST FLUORIDE: A NEW LOOK AT THE SCIENTIFIC EVIDENCE

Paul Connett, James Beck
and H.S. Micklem

Chelsea Green Publishing, Vermont,
374 pp., \$24.95, p/b -
ISBN 978-1-60358-287-2

Some issues drive debate into deeply entrenched positions. The cause is rival assumptions that are beyond

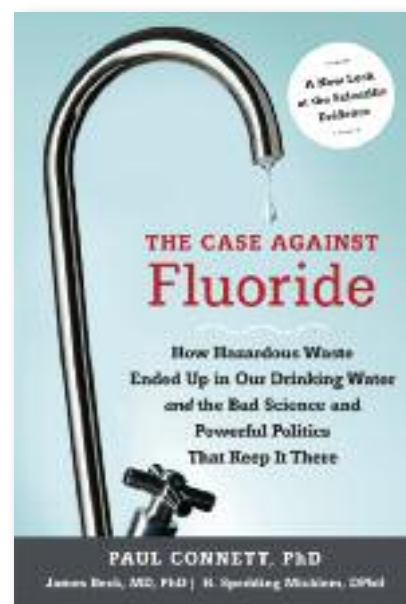
debate and never declared. When industrial politics is part of the mix then a hot, remorseless shouting-match is the usual result.

Fluoridation of water is the archetypal example. It began in 1930s America, at a time when emergent aluminium, coal, fertiliser and ceramics industries were bringing a lot of fluoride effluents to the surface, and sugar manufacturers were seeking a solution to the problem of tooth decay that did not involve reducing consumption of their products. A chemist retained by both lobbies suggested that they could solve each other's problems. By 1950, on the basis of industrial imperative rather than science, the practice of water fluoridation at 1 part per million (ppm) had been endorsed by the US Public Health Service. Five million English citizens now receive fluoridated water.

Several important critics of fluoridation have put pen to paper since then, but these authors are the first to do so with benefit of credible and disinterested scientific reviews of the evidence arising from 50 years of fluoridation. They present it clearly and convincingly.

They have come on the scene relatively recently, Connett having passively supported fluoridation up to 1996. But his academic credentials, no-nonsense attitude and belligerence quickly earned him a formidable reputation. He has been described as the world's foremost critic of fluoridation, and he probably is. This background gives rise to the only limitation of the book. It is unashamedly partisan and Americo-centric. It will however serve the North American public and academy brilliantly, and the rest of us very well.

The authors make no attempt to address the original and abiding



difficulty, how to dispose safely of fluoride waste. It is extremely reactive, etches glass and metals, and leaks readily from containers and all long-term repositories so far devised. It unzips hydrogen bonding so is poisonous at any concentration to all living systems. It accumulates in calcified tissues and the pineal gland. It does teeth little good, and just as much harm. Its potential effects on the thyroid gland have never been properly addressed.

We do not yet acknowledge how much is consumed. Evidence reworked from the UK National Diet and Nutrition Survey 2000-3 and published since Connnett went to press, indicates that 21% of the British public consume more than the 'safe intake' of fluoride, even in non-fluoridated areas. It comes from tea, dental toiletries, Mediterranean fish and who knows where else. If to that you add water fluoridated at 1 ppm, the proportion who over-consume fluoride rises to 65%.

The problem of personal consumption can be solved overnight by avoiding all the usual suspects - in toothpaste, water and Mediterranean produce. Reverse osmosis will remove 95% of all water contamination, including fluoride, but the contaminants still pass to the drainage system and thence to rivers and oceans.

There may be vitreous materials that will bind fluoride indefinitely and can be stored in mine shafts. I hope Connnett et al will one day bring their capable minds to bear on this. I suspect that we will have to accept some degree of fluoride contamination to our waters - but at the polluter's expense - and learn to manage on recycled aluminium, proper diet and careful flossing. These three authors are well-placed to unravel such problems in future writings.

Meanwhile this volume will quickly become the most trusted compendium of evidence and argument critical of water fluoridation world-wide - and quite right too.

Dr. Peter Mansfield is Founder of Good Healthkeeping.



philosophy-religion

New Thought Revisited

David Lorimer

IN TUNE WITH THE INFINITE

Ralph Waldo Trine

Available in paperback from Amazon at £4.74 (original 1898)

THE WISDOM OF THOMAS TROWARD

Thomas Troward

Wilder Publications, 2007, 260 pp., £7.95, p/b - ISBN 1-60459-063-7

THE HIDDEN POWER – AND OTHER PAPERS ON MENTAL SCIENCE

Thomas Troward

Forgotten Books, 2008, 132 pp., see www.forgottenbooks.org

THE MASTER KEY SYSTEM

Charles Haanel

Various editions available on Amazon.

THE LAW OF SUCCESS

Napoleon Hill

Orne Publishing, 2010, 461 pp., \$49.95, h/b - no ISBN given.

Over the last 18 months I have read extensively among the original New Thought authors, going back to the essays of Emerson, which I reread early last year and which one should go back to on a regular basis. Emerson said that 'Great men are those who see that spiritual is stronger than force, that thoughts rule the world' and that 'we live in the lap of immense intelligence, which makes us receivers of its truth and organs of its activity.' The basic tenets of the New Thought movement are that:

- Infinite Intelligence or God is omnipotent and omnipresent.
- Spirit is the ultimate reality
- True human self-hood is divine – humans are spiritual beings
- Divinely attuned thought is a positive force for good
- Mental attitude is fundamental

There is an emphasis on inner life and the creative power of thought, and it follows that right thinking has a healing effect. Life is seen in terms of light rather than sin and darkness, corresponding to a positive and optimistic outlook. Looking at my edition of *In Tune with the Infinite* by Ralph Waldo Trine (1866-1958), I

found that I had read it 25 years ago but had not applied any of its tenets in a practical sense. I also discovered that Trine's experience was quoted by William James in his *Varieties of Religious Experience*. James himself stated that 'The greatest discovery of my generation is that human beings, by changing the inner attitudes of their minds, can change the outer aspects of their lives.' This points to the primacy of the inner – of mind, consciousness and thought - while the outer realm is that of effect. Trine maintains that 'The great central fact of the universe is that Spirit of Infinite Life and Power that is behind all, that manifests itself in and through all; that self-existent principle of life from which all has come. If there is an individual life, there must of necessity be an infinite source of life from which it comes. In essence, the life of God and the life of man are identically the same, and so are one ...but the degree is vastly different.' It follows that 'The great and central fact in human life, in your life and mine, is the coming into conscious realisation of our oneness with this Infinite Life, and the opening of ourselves fully to this divine inflow. What does this mean? That we are recognising our true identity, that we are bringing our lives into harmony with the same great laws and forces as have all the prophets, seers and sages in the world's history.' Trine's book sold 2 million copies, a huge figure for a book at that time.

This same insight can be found in the work of Thomas Troward (1847-1916), who was a circuit judge in Punjab, and had the opportunity of studying Indian religion over several decades. In his retirement, he painted and wrote books, the most famous of which is *The Edinburgh Lectures on Mental Science* from 1904. This is included in the compilation cited above. Troward's work is extraordinarily precise and profound, and requires close study, as his only pupil Genevieve Behrend discovered when she first bought the *Edinburgh Lectures*. Troward characterised the human mind as a centre of divine operation, which is always for expansion and fuller expression: 'The Centre of all Being is also the centre of our being. It is one-with-ourselves. Individuality is the necessary complement to Universal Spirit. The whole problem of life consists in finding the true relation of the individual to the Universal Originating Spirit. The great self-recognition is that of our relation to the Supreme Mind. That it is the generating centre and that we are distributing centres.' This self-recognition (Self-recognition) is a fundamental moment in human life when one realises that one's own

consciousness is in fact the Universal Mind. This realisation sets up a circuit which can only come into being on an individual basis, like plugging into the mains. Troward comments that if God is incorporated, then we as individuals are the Inc. of God Inc.

For readers new to Troward, it might be best to start with *The Hidden Power*, where he clearly explains the nature of what he calls the Great Affirmation, namely the I Am, explaining it in terms of the experience of both Moses and Jesus. There is a remarkable chapter on the Bible and New Thought, which is elaborated in his other book *Bible Mystery and Bible Meaning*. When I read what he had to say about the symbolic relationship between the Father and the Son, between the universal and the individual, or 'the Father as Absolute, Originating, Undifferentiated Life, and the Son as the same Life differentiated into particular forms', it felt like scales were falling from my eyes as one realises more deeply the Infinite within ourselves, the same I AM that I am, the possibility of our personality expanding as we become aware of ever increasing degrees of Life in ourselves. Troward also rehabilitates desire, defining it as the mind seeking to manifest itself in some form which as yet exists only in thought. So desire is the principle of creation by means of growth, and growth always takes place on every plane as an expansion from the nucleus or centre outwards, whether this be a seed or an idea. Desire is creative power, of which Divine Love is the supreme expression. In this sense, wisdom is the desire to know more deeply.

I first came across Charles Haanel's *Master Key System* at a conference for aspiring Internet entrepreneurs at the O2 in October 2009. This was organised by Andrew Reynolds, who arranged for the entire proceeds of the event - over £700,000 - to be donated to the Make a Wish Foundation. It turned out that Andrew was on his uppers and out of work in 1997 when he found this book in a second-hand bookshop and read it at one sitting. This made him realise that he could create a very different future, so he wrote down some outrageous goals for five years thence, and by 2002 he had more than achieved them. He has gone on to make over £50 million in the intervening period and now spends a good deal of his time and money helping charities. This book started as a 24-part correspondence course in 1916, and is a brilliant explanation of the Oneness of Mind: '*There is one Principle or Consciousness pervading the entire universe. As this*

Consciousness is omnipresent it must be present within every individual; each individual must be a manifestation of that Omniscient, Omnipotent and Omnipresent Consciousness. Your consciousness is (therefore) identical with the Universal Consciousness, all mind is one mind. Each individual is the individualisation of the Universal, the Cosmic Mind. Each chapter consists of an introduction, a numbered exposition of the ideas, a mental exercise and a summary. I have never seen anything set out so clearly, and the book had an enormous influence on subsequent writers including Napoleon Hill (1883-1970).

A key turning point in Napoleon Hill's life was his meeting with the steel magnate Andrew Carnegie in 1908. Carnegie was then the wealthiest man in the world and was busy building libraries and setting up foundations. He commissioned Hill to interview several hundred successful people that he knew in order to formulate the laws of success. He told him that this would take 20 years, and although he would benefit from the introductions to such people as Thomas Edison, Henry Ford, Theodore Roosevelt, John D. Rockefeller and Alexander Graham Bell, Carnegie would not support him financially, so he would have to make his own way. The story of this encounter is quite riveting and can be found on a CD called *The Science of Personal Achievement*, which you can order on Amazon. The edition referenced above is the original 1925 one, which he sent to his correspondents. Most editions are the revised 1928 one, so I would strongly advise trying to get hold of this edition - readers can let me know if they have difficulties as I have a small stock and can order more.

This book is the origin of most subsequent work on success and personal development, and is absolutely essential reading. This particular edition is leather bound and has many inspiring quotations on single pages throughout the text. Hill's perspective on creative thought is identical with the above authors, and he identifies 15 key attributes: having a definite purpose, self-confidence, capacity for initiative and leadership, imagination, taking action, enthusiasm, self-control, the habit of performing more service and paid for, attractive personality, accurate thought, concentration, tolerance, resilience, cooperation and the Golden Rule. This is a book to be studied rather than casually read, and there are many practical suggestions throughout. It has rightly been deemed a classic and the earlier in one's life one reads it, the better - but it's never too late!

The cumulative effect of these and other books gives one a powerful creative perspective on life and enables one to understand the relationship between synchronicity and the law of attraction within the context of the Oneness of Universal Mind. One realises that everything around us is the outcome of creative thought, which is especially true of literature, art and architecture. The greatest buildings were once a thought in the architect's mind. I would welcome correspondence from those who would like to find out more, as I have a list of other books and access to more up-to-date audio material. The New Thought movement was eclipsed by behaviourism in the 1920s (it is ironic that Haanel wrote a book called *The New Psychology* in 1921) but I think it is now time for this outlook to be rediscovered and applied in the 21st century.

Awakening the Sacred Masculine

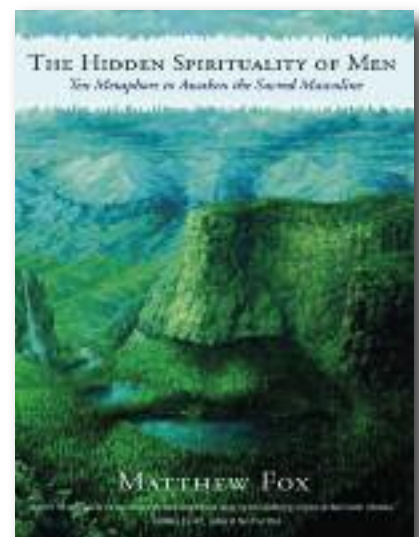
David Lorimer

THE HIDDEN SPIRITUALITY OF MEN

Matthew Fox

New World Library, 2008, 338 pp., \$15.95, p/b - ISBN 978-1-57731-675-6

We have heard a great deal about the Sacred Feminine, but the Sacred Masculine is a much less familiar phrase. Emerging from patriarchal dominator traditions into a more balanced culture, Matthew Fox identifies the need for new models of masculinity beyond the macho image that real men eat beef. It is not only the spirituality of men that is often hidden, but also their emotions. This attitude can cut us off from the roots of life, sapping our vitality in the process. It is mystics and prophets



who provide the juicy life forces of religion, while priests erect structures and may impose restrictions through the cultivation of sin, shame and guilt. DH Lawrence identifies this when he says that men strive to get into direct contact with the elemental life of the cosmos - mountains, clouds, thunder, air, earth and sun. This gives us energy.

The main body of the book is devoted to ten archetypes of authentic masculinity: Father Sky, the Green Man, Icarus and Daedalus, Hunter-Gatherers, Spiritual Warriors, Numinous Masculine Sexuality, Cosmic and Animal Bodies, the Blue Man, the Fatherly and Grandfatherly Hearts. This makes for an extraordinary journey through these ten metaphors. The Green Man, paired with the Black Madonna in the 12th century, has made a comeback as a symbol of our reconnection with Nature and our understanding of the sacred tree. The Greek myth of Icarus reminds us that we need wings to take flight as we track a middle path between the Earth and the Sun. There is also the aspect of intergenerational wisdom in this story.

The hunter-gatherer archetype is deep within us and its negative aspect is demonstrated in the psychodynamics of gangs based on respect but ultimately on violence and shame. We need less destructive ways of dealing with negative emotions. There are also elements of the hunter-gatherer in the search for truth and knowledge. And in sport we both compete and cooperate. This leads naturally into the archetype of the spiritual warrior, and there is a very interesting discussion of the relationship between being a prophet and a warrior - one who does what is right, following his heart. Matthew outlines the four steps to spiritual warriorhood involving the *via positiva* of celebration, the *via negativa* of surrender, the *via creativa* of giving birth and the *via transformativa* of speaking on behalf of justice.

The chapter on sexuality is central, standing as it does for generativity and creativity, for passion, ecstasy and joy, for communion with each other and with God. In the West, sexuality has most commonly associated with sin and shame, a denial of what Riane Eisler called sacred pleasure characteristic of some pagan traditions. It is arresting to read the list of the many names of sexuality and to realise the power of repression as well as the extraordinary liberation that has taken place in the last 40 years. We rarely take time to appreciate the amazing nature of the human body which itself contains elements of stardust uniquely recombined. There is also a

sacred anatomy in the chakra system, and Matthew suggests ways of recovering body awareness.

The Blue Man was a new concept to me but one developed by Muktananda and Hildegard of Bingen, standing for expansion of consciousness, expression of compassion and artistic improvisation in our lives, the recognition of beauty and justice. The two chapters on the fatherly and grandfatherly heart speak directly to the role of men as fathers and mentors. The father is missing from many disturbed childhoods, and there is an inspiring list of the qualities of the paternal heart, which I went through with my son George as I was reading the book. The grandfather is the elder, a time not of retirement but what Matthew calls reirement and regeneration.

Ultimately, we have to marry the masculine and feminine within ourselves, corresponding to the Sacred marriage of the cosmos between Father Sky and Mother Earth, the Green Man and the Black Madonna, Yin and Yang, East and West, body and soul, humans and the divine, left and right hemisphere thinking. All these point towards a necessary integration which we can only achieve through living life authentically. To this end, Matthew provides a number of exercises in the appendix and redefines the nature of real men in his conclusion. It is an inspiring encouragement to choose life and engagement, to open the heart, to defend what we cherish, to listen as well as to teach, to be generous and embrace the feminine within ourselves - 'nurturing, protecting and providing for our communities.' Men and women alike will be enriched by this bold and visionary work.

Metaphysics as a Possible Open System

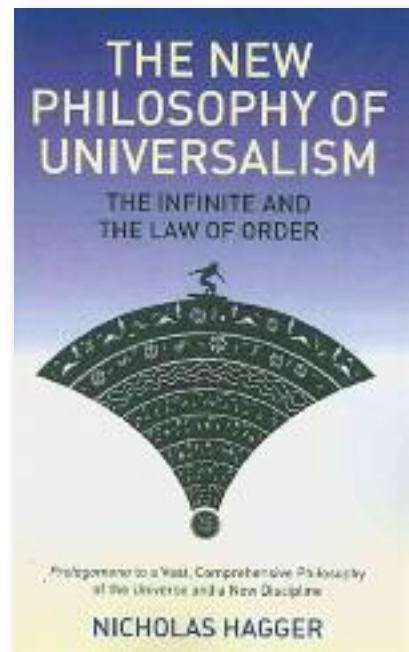
Max Payne

THE NEW PHILOSOPHY OF UNIVERSALISM

Nicholas Hagger (SMN)

O Books 2009, 496 pp, £24.99, p/b - ISBN 978-1-84694-184-9

This book offers a comprehensive philosophy of the universe. At these words one's heart sinks. Here is yet another elaborate metaphysical cloud castle which seeks to tie together science, religion, God, and matter all in one formula. Fortunately this book is better than its pretensions. Although it does offer elaborately structured answers to metaphysical issues, to what might be considered an excessive degree, it is a programme for further inquiry, not a



final answer - the difference is important.

Hagger starts with the despicable bankruptcy of Anglo-Saxon philosophy in the 20th century. What by definition is supposed to be the wisdom which unites all knowledge has been narrowed down to the linguistic analysis of word problems. Future historians may have much to say about the narrow concerns of academic philosophers and the crisis of Western civilisation in the 20th century, but that is not Hagger's concern. He seeks a foundation for true metaphysical philosophy, and he finds it in the void of nothingness from which all things proceed.

Since everything comes from this, then this must be the beginning for philosophy. In cosmology this is the 'big bang' whereby the material universe emerges from a fluctuation in the quantum vacuum, but Hagger has already argued that Reductionist Materialism does not work. Therefore what emerges from the void is not only matter but consciousness as well. Thus the basis of Universalist philosophy is the unfathomable final Reality from which emanates an evolutionary wave of matter, energy, life and consciousness. This wave is constrained by two fundamental parameters, the law of order, and the law of randomness. Hagger is a polymath, and he shows at great length, and in fine detail, how cosmology, physics, and evolutionary biology can be made to fit into this scheme. Ethics and the ultimate unity of religious experience obviously follow.

The idea that the material world is an emanation of the timeless One is a common theme in philosophy East

and West as Neo-Platonism and the Vedanta show, but two things make Hagger's Universalism distinctive. The first is the special role of the quantum vacuum – something which previous thinkers would not have known about: the second is two questions that are asked, and not answered. In Universalism's system there are 12 levels of consciousness. He is aware that the construction of his philosophical system is the work of the intellect, but he tries to rise to a higher intuitive level in order to solve two key questions, the nature of the interconnection between mind and matter, and the fate of the individual self after death.

Even given the synthesis of science and spirituality given by Universalist philosophy, Hagger's intuition can find no way to explain how a material energy measured in mathematics transmutes into a conscious thought. The secret lies in the nature of quantum vacuum, but he has the honesty to admit that he does not know what it is. Again what happens to the atomic unit of consciousness in time which is the human self when the body dies? Is it reabsorbed into the timeless One behind all reality? Does it remain on some cosmic shelf to be reincarnated, or resurrected at the end of time? The answer is we do not know.

It is refreshing that such a vast metaphysical synthesis can reinterpret itself as an open system of inquiry which leaves major questions unanswered.

Max Payne is a Vice-President of the Network and a Founding Member.

Spiritual Densities

David Lorimer

TO LIVE WITHIN

Lizelle Reymond and Sri Anirvan

Morning Light Press, 2007, 333 pp., \$17.95, p/b – ISBN 978-159675-016-6

Lizelle Reymond (1899-1994) was a Swiss seeker who studied deeply within Oriental traditions and spent extended periods in India, where she met her spiritual master Sri Anirvan, who belonged to the Bauls. Later in her life she also studied Gurdjieff and worked with Madame de Saltzmann. This book is the story of her journey and the insights she gleaned along the way. The first part describes her life in the Himalayan Hermitage, then the second contains her understanding of Sri Anirvan's teachings, arranged thematically. Then there are two essays by Sri

Anirvan, followed by some letters and poems. The material is among the most profound I have encountered.

The introduction is written by Jacob Needleman, who begins by observing the potency of the Hindu understanding that the ultimate source of truth and meaning is the Universal Self within ourselves. This should not remain at an abstract level, but should rather be a living reality as we relate to this palpable force within. Needleman also remarks that the text is like a hologram containing the whole teaching in every part. Here there is only space to touch on a few central themes. First, the three densities of matter, energy and spirit corresponding in this teaching to the three gunas of *tamas*, *rajas* and *sattva*. There is no inherent distinction between these three levels, but rather the inner is a refinement of the outer, reflecting a process of knowledge that is searching for itself and gradually discovers itself through graduated interiorisation. The opposite process, from inner to outer, is manifestation. At a collective level, these processes are very slow - it takes a long time for an acorn to grow into an oak.

Sri Anirvan explains that the process of expansion does not entail doing anything, but is rather being and becoming: 'the Spirit is and the manifestation does.' We are both Spirit and manifestation, which means that we need to be ourselves, growing from the centre outwards just like the sprouting of a seed. This expansion is achieved through love as we emerge from our little ego. Out of being and becoming flows the capacity to do. Being is always primary. And in being, we are preparing the ground for the Divine to be planted consciously. So the three laws that govern life are the law of growth, the law of expansion and the law of intensity, as illustrated in the tree of life. We must be firmly rooted before we can expand and reach out. The intensity is a growth and focus of consciousness. Through practice, one becomes aware of what Sri Anirvan calls an radiant body of extremely fine nervous sensations within the body of flash as currents of light that can be felt in deep meditation as one proceeds towards a state of less density.

The chapter on life and death contains some extraordinary insights, for instance 'to die consciously is simply the passage from one density to another in the full consciousness of the inner being.' Meditating on impermanence brings the realisation that everything will finally disappear into the Void. The self might be eternal, but the body is not but behind this one can feel 'an

expansion into oneness with reality behind.' Death becomes a passage to a lighter density, where matter returns to matter and energy to primordial energy. Sri Anirvan explains that only those rare beings who have worked consciously to bring their different I's together around a central axis escape this dispersion of energy - esoterically, this means building a light body. We are advised not to struggle when the moment of death comes, but rather to let ourselves glide, since the wave that will carry us away is cosmic. We cannot separate death and life, but we fear death from the perspective of our ego, whose very nature is separation. In terms of preparation, we are advised to bear in mind that time merges into space as life merges into the Void. Lizelle Reymond herself practised dying every night and being reborn every morning. In doing this, we can become truly grateful for being alive.

psychology- consciousness studies

The NDE and Beyond

David Lorimer

CONSCIOUSNESS BEYOND LIFE

Pim van Lommel (SMN)

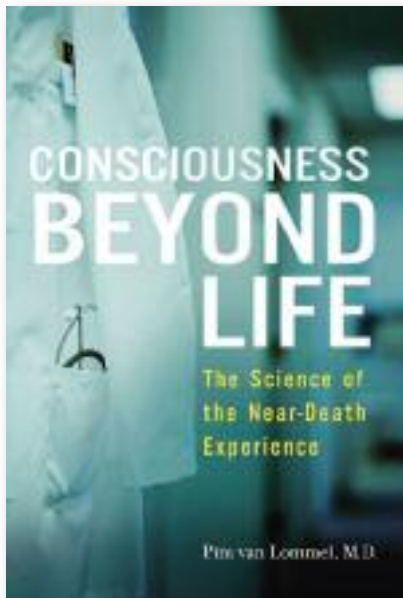
HarperOne, 2010, 442 pp., \$26.99, h/b – ISBN 978-0-06-177725-7

SCIENCE AND THE NEAR-DEATH EXPERIENCE

Chris Carter

Deep Books, 2010, 303 pp., £15.99, p/b – ISBN 978-159477356-3

Near-death studies are now a well-established field, even if they receive scant attention from the mainstream scientific community. Between 1975 and 2005, 42 scientific studies were published involving 2,500 patients. Among the foremost of these studies was the one led by Pim van Lommel, the results of which were originally published in *The Lancet* in December 2001. Pim's new book is the most significant contribution to the field to appear for many years, containing as it does his mature philosophical reflections on the implications of his findings. Chris Carter covers much of the same ground in his important new book, reviewing a wide range of studies and vigorously challenging materialist orthodoxy.



Both books address scientific resistance to serious investigation of paranormal aspects of consciousness. As early as the 1890s, Dutch researcher Frederick van Eeden observed that this resistance was emotional rather than empirical and was based solely on 'an unphilosophical attachment to a closed system', which he found barely credible and which represented the greatest foe of scientific progress. In his introduction to Chris Carter's book, Neal Grossman forecasts that it would take another generation before the findings of these two books are taken on board and overturn the belief that consciousness is produced by the brain. Although this is assumed as a self-evident proposition, it has never in fact been proven, and cannot be sustained in view of the data described in these two books. Besides, as Grossman observes, the data have convinced virtually everyone who has taken the trouble to examine it that materialism cannot provide an adequate explanation.

Indeed, Pim goes further in concluding that 'there is no biological basis for enhanced or enhanced consciousness, which is rooted in a multidimensional nonlocal space.' The paradox is that experiences of enhanced consciousness occur when the normal neural correlates of waking consciousness are not functioning, which suggests that the brain must exercise a channelling or inhibitory effect. He proposes that our waking consciousness does have a biological basis because our body functions as an interface. This enhanced consciousness is not limited to the brain because it is inherently nonlocal, and this nonlocal consciousness or

space is metaphysical in that there is no distinction between nonlocal space and consciousness - David Bohm articulated a similar concept with his implicate order. In formulating this theory, Pim draws on the work of a number of physicists, including Henry Stapp.

A fundamental point emerging from both books is that consciousness is no mere epiphenomenon, but has causal powers, as indicated by psychokinesis, the placebo effect and neuroplasticity demonstrated by long-term meditators. These findings are increasingly recognised, but they are fundamentally at odds with a one-way deterministic understanding of the nature of consciousness. The materialist model is in need of urgent revision. It can only be maintained by continuing to ignore the field covered in these books. For philosophers like Dennett, dualism is to be regarded as anti-scientific while materialism is self-evident in the equivalence of mind and brain. At this point, one needs to re-emphasise that this is simply an unexamined philosophical assumption. In addition, much of the thinking is based on Newtonian mechanics of separation, linear causality and localisation and has not taken into account the much more subtle and extensive framework of quantum mechanics when applied to consciousness.

Research into NDEs stems from the insights of the experiencers themselves, and Pim cites an extensive set of experiences from Monique Hennequin, which gives the reader a glimpse into the hidden workings of consciousness in the universe. Many of us live in fear and without taking full responsibility for our thoughts and feelings, still less realising that we already live in many dimensions. Ultimate knowledge is achieved by becoming one with the Source, which also entails understanding the oneness of life and consciousness, of light and love. This perspective helps one penetrate the veil of separation represented by our bodily distinctness. Our essence is being, thoughts are causal - and, as Monique expressed it: 'what you think matters; in fact, it forms matter.'

Pim's book presents a comprehensive account of his own research and the key findings from other studies. He defines the nature of the NDE and the changes people experience in the short and medium term. It was particularly interesting to compare changes in the lives of those who did have NDEs and other members of his study who were near death but had no NDE. The core of the book is concerned with what happens in the brain when the heart stops and how this relates to what

we already know about brain function. It is at this point that Pim brings in quantum physics and arrives at the conclusions described above. These are by no means final, but they are a great deal further down the road than most current thinking. Towards the end of the book, Pim considers some implications of NDE studies and the practical significance of NDE in healthcare, for instance in relation to organ donation and the definition of brain death. Some readers may not realise how much courage it takes to nail one's colours to the mast and separate oneself from the scientific pack. Pim has received his fair share of unwarranted intellectual abuse, and has demonstrated exemplary integrity in pursuing his studies and their implications. His book is essential reading for students of consciousness, who will find their minds stretched in new directions.

Chris Carter dedicates his book to Henri Bergson, William James and Ferdinand Schiller, who were among the first people a hundred years ago to question the assumption that the brain produced consciousness, suggesting instead that we needed some form of transmission theory. I discussed this theory extensively in my book *Survival*, citing original sources which Chris reproduces from my page references without commenting on my own analysis. However, I don't disagree with this and he brings the arguments up to date, also discussing the views of Wilder Penfield and Sir John Eccles. The first part asks if consciousness depends on the brain, covering similar ground in physics but also with an extensive discussion of memory drawing on the theories of Rupert Sheldrake. The second part is a detailed analysis of the near death experience, considering proposed psychological, physiological and pharmacological explanations. He also discusses the dying brain theory of Susan Blackmore, veridical near death experiences and NDEs in the blind. All this makes it very clear that NDEs represent a serious challenge to scientific materialism: the hypothesis that the brain produces consciousness has in fact been falsified, but most scientists remain blissfully unaware of this fact! The usual procedure is simply to ignore this evidence rather than engage with it, although occasionally sceptical commentators like Michael Shermer come up with astonishing observations like the following: 'if the brain mediates all experience, then paranormal phenomena are nothing more than neuronal events.' As it happens, Shermer even managed to draw the conclusion that Pim's study supported his materialistic position

that mind and spirit are identical with brain and body, in flat contradiction to Pim's own conclusion.

In the third part of his book, Chris addresses the literature of deathbed visions, showing how it is consistent with descriptions of NDEs. This works as far as it goes, but Chris is evidently not familiar with the more recent work by Peter and Elizabeth Fenwick as described in their book *The Art of Dying*. Here they described not only deathbed visions, but a whole series of other phenomena which they characterise as end of life experiences (ELEs) - so another edition of this book could update the third part. However, the book is a bold and well argued statement. The only question remaining is whether a significant number of scientists will actually read these books and find themselves able to modify their views, drawing on a new evidence base which can no longer be dismissed, even if it is still largely ignored.

Life after Life after Life

Martin Lockley

EVIDENCE OF THE AFTERLIFE: THE SCIENCE OF NEAR DEATH EXPERIENCES

Jeffrey Long and Paul Perry,

Harper One 2010, 215 p, \$xx, h/b- ISBN 978-0-06-145255

'the soul turned, at one time, toward matter: she fell in love with it, and, burning with desire to experience bodily pleasures, wishes no more to be separated from it. Thus the world was born. From that moment the soul forgot herself; she forgot her original dwelling, her true centre, her everlasting life...'

The Nag Hammadi manuscripts:
Doresse (2005)

Can we separate our earthly experience of some 'three score years and ten' from the near-immortal 3.5 billion year history of life on earth or the even older intelligent or conscious universe that makes cosmologists awestruck and lyrical? Isn't the universe a thoroughly integrated, quantum flux of energy-matter, encouraging serious consideration of immortality, consciousness beyond life and the universal Akashic record? Surely the testimony of countless mystical and spiritual experiences, Near Death Experiences (NDEs) and Out of Body Experiences OBEs is now so common and consistent that a new Consciousness paradigm is already all but accepted.

Perhaps it is just personal intuition and experience that wishes to insist that ever-expanding interest in these realms of consciousness is no mere fad. But the fact is that these days compelling new studies proliferate. Among these I cite three recently penned by highly credible authors: *Love Beyond Death* (van Kraalingen, 2011), *Consciousness Beyond Life* (van Lommel, 2010) and *Evidence of the Afterlife* which I review here.

This latter exposition, by senior author Jeffrey Long MD and co-author Paul Perry, is a well-organised account of (NDEs) that raises perennial questions about the mysteries of consciousness and spiritual dimensions of human 'existence.' The book is matter-of-fact, outlining Long's conventional medical education and conversion into a NDE believer through exposure to considerable evidence, quite reasonably regarded as compelling and 'scientific.' Thanks to a conventional medical education Long began as a typical skeptic with no knowledge of the NDE phenomena, but now, despite a still-skeptical profession, claims his absolute conviction that there is life after death. He established the NDE Research Foundation to solicit and post some 1600 online accounts www.nderfr.org/afterlife including those submitted in languages other than English, but since translated.

Long outlines up to twelve 'elements' which may typically be associated with NDEs.

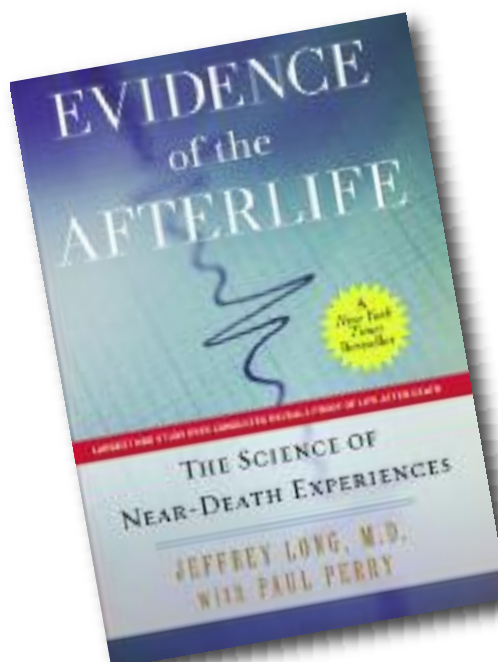
They are 1) Out of body experiences, 2) Heightened sense, 3) positive feelings, 4) tunnel experiences, 5) mystical/bright light, 6) other world/mystical beings, altered time-space sense, 8) life

review, 9) heavenly realms 10) special knowledge, 11) boundary encounters, and 12) return to body. Most of the book is then structured around nine 'proofs' of NDEs, each with its own chapter as follows: 1) Lucid Death, 2) Out of Body Experiences (OBEs), 3) Blind Sight, 4) Impossibly Conscious, 5) Perfect Playback, 6) Family Reunion, 7) From the Mouths of Babes, 8) Worldwide Consistency and 9) Changed Lives. Many such experiences typical of NDEs, most of which share the characteristic of extreme lucidity, are inexplicable by conventional wisdom if the individual patient is unconscious, or actually declared clinically dead! Long is therefore able to dismiss the explanations of skeptics who try to explain away reports as dreams or hallucinations. Given that reports from young children, and diverse cultures are highly consistent, we must also dismiss the skeptical notion that people may deliberately or inadvertently tell tales based on what they have read on the subject. Long reports that fraudulent website postings were vanishingly small, and very easy to spot.

There is much literature on spiritual and/or mystical experience and its sustained after effects. Most who have had such experiences regard them as positive, long-term and life-changing, enhancing what Richard Bucke characterised as the intellectual and moral senses in *Cosmic Consciousness*. Changes arising from NDEs are remarkably similar and often include enhanced healing ability and interest in spiritual practices. This is not to say that the experiences do not sometimes create turmoil and difficulty adjusting to day to day life.

Long reports that when seven of the survivors of attempted suicide jumps from California's Golden Gate Bridge were located, all subsequently reported spiritual rebirth experiences, with no further suicidal inclinations. It is not unknown for those who have had spiritual experiences (highs) and intimations of immortality to experience low points that fuel a yearning to shuffle off the mortal coil and aspire to a spiritual life beyond death (Snell, 1959). Herein lies a source of guilt and ambivalence about why a destiny of suffering is necessary in mortal life. Why do encounters with spiritual beings often involve the injunction to resume earthly life 'until the time is right?'

Perhaps there is little more to say about *Evidence of the Afterlife*, except that besides being a very cogent exposition, consistent with almost all one reads,



it touches the most fundamental questions of existence and the spiritual side of our being. Ever since Raymond Moody's pivotal *Life after Life* most SMN members are likely well-versed in the fascinating metaphysics that enlivens the new consciousness generation. David Lorimer's *Whole in One* stresses the theme of 'interconnectedness' and re-quotes Solzhenitsyn's conviction that the goal of existence is 'not happiness but spiritual growth'. History shows us that intimations of the human spirit's immortality are as old as our most venerable literary traditions and extend deep into our even more ancient oral traditions. The *Nag Hammadi* citation given above neatly expresses the experience of the fall into our present state of dual, self-consciousness, which inclines, even propels, us into a sensory relationship with the physical world. Our propensity to fall in love with sensuous bodily pleasures raises a plethora of interesting psychological issues including the common, but often dissatisfying, notion that the physical sensory world is all that exists. Whereas those of a certain religious bent regard sensuous pleasures as somehow profane, and distracting from our sacred relationship with the divine, others find the same pleasures as the medium for spiritual communion with the world. So, while happiness may not be the reward of hedonism it may be found in the 'right' appreciation of the physical world, seen not as 'all there is' but as part of a spiritually infused and interconnected universe.

Lastly, I would stress that there appear to be remarkable parallels between NDEs, OBEs and various types of religious, spiritual or mystical experience. Almost all those reporting such experiences claim that their consciousness has undergone significant transformation, making them more aware of the spiritual, non-physical dimensions of existence, and the need for love, compassion and meaningful human relationship. Accompanying such shifts in consciousness many experience a new confidence in their intuition, new psychic gifts and healing powers. Sometimes quite a price is paid for such life-changing experiences, which may be initiated by periods of significant stress and suffering. But does this make the challenges of spiritual growth much different in principle from those faced in life's other physical, emotional and intellectual arenas? In the end, most report that spiritual growth and insight have been more than worth the challenges and difficulties. At the risk of oversimplifying the riddles of

existence there would be little point in striving for spiritual, emotional, moral or intellectual growth if physical experience were all existence had to offer. Millennia of human experience attest to life after life after life. We may, in time, come to regard the notion of an 'afterlife' as a misnomer. Indeed that the very notion of linear time is compromised by spiritual and NDE experiences, and the intimations of immortality that accompany such experience appear to herald a shift in consciousness to which all humanity, and our present science, may succumb.

Doresse, J. (2005) *The Discovery of the Nag Hammadi Texts*, Inner Traditions, Rochester, Vermont.

Van Kraalingen, E. (2011) *Love Beyond Death*, O Books, Ropley, Hants.

Van Lommel, P. (2010) *Consciousness beyond Life*, Harper One, New York.

Snell, J. (1969) *The Ministry of Angels*. Citadel Press, New York.

A Spiritual Odyssey

David Lorimer

LOVE BEYOND DEATH

Elleke van Kraalingen (SMN)

O Books, 2011, 225 pp., £14.99, p/b
– ISBN 978-1-84694-379-9

This utterly captivating story is intertwined with the Network and Frenchman's Cove, where we held a conference on *The Conscious Universe* with Dean Radin in 1999. I had met Hermod Sverre, a tall Norwegian doctor, some years before and we immediately became good friends. He attended a number of Network events and had registered for the conference in Jamaica with his girlfriend Elleke van Kraalingen. This was to be an extraordinary trip to paradise, a dream come true, not only in terms of the depth of their relationship, but also as an intense experience together. They seemed blissfully happy in each other's company, radiating love and joy to all around them.

When the conference finished, they went to spend a further week swimming and diving in Negril, not far from Montego Bay. On the last evening, Hermod miscalculated when crossing the road and was killed instantly by a car that hurtled him 50 yards through the air. This might have been the end, but it turned out to be a new beginning. His death was a tremendous shock to his friends – it seemed unimaginable that such a vital human being was no longer with



us. 10 years later, Elleke was able to share her extraordinary story with Network Members, again at Frenchman's Cove at a meeting on death and survival with Peter Fenwick, David Fontana and myself. As readers will know, David has since died, but contributed an illuminating foreword to the book which he calls a remarkable document.

As the title suggests, this is a story of love beyond death, which will certainly stretch your mind and enlarge your understanding. As a psychologist and long-time meditator, Elleke is more aware than most of the way our minds work, including her own. She does not romanticise the relationship, but recounts the challenges they faced as well as the ecstasy they experienced. Reading between the lines, there are hints of what was to come in conversations relating timelessness to our time-bound perceptions. The narrative is very vivid, recounted as it is in dialogue as the story unfolds. There are rough edges to be smoothed and shadows to be integrated. Hermod is ambivalent about life with its suffering and has difficulties with commitment, even though Elleke is clearly the love of his life.

Suddenly, he is torn from her in an instant described in searing detail. This cannot be happening. And yet it is, and, amazingly, he is almost instantly with her in his subtle form. The next few hours are a nightmare, but she feels his presence constantly when she has to make the inevitable phone calls to Europe. She has three children, who were already becoming fond of him, so it is a great shock to them as well. He explains to her that there is no death, no time, only reality. She can't doubt this with one part of her being, but still feels his physical

loss acutely. Then there is the mortuary, the flight home with an empty seat beside her, the funeral, and the embrace of family and friends.

Then an extraordinary odyssey unfolds as Hermod is able to take Elleke into realms not normally consciously accessible to human beings in the flesh. These journeys resemble the most remarkable accounts of near-death experiences and remind the reader of similar descriptions by Swedenborg in the 18th century, although these did not take place within the context of a personal love becoming cosmic. Elleke showed enormous trust and courage in venturing so far into the unknown. But the power of their love enabled this to happen, and the reader is swept along as new vistas of wisdom and insight are revealed. Being familiar with the field, I recognise the coherence of the story as they travel to ever finer densities, merging together and even losing any everyday sense of individuality at what Ken Wilber would call the causal level.

Here, timelessness stretches in all directions and we can realise our extended identities both in terms of time and incarnations, and also as parts of group souls with a common purpose, all contributing to each other's growth and to the growth of the whole. Each chapter has a short poem at the beginning, capturing the essence of the experience – both melting into the One and falling back into time and space where they are still one, and yet apart. In the subtle realms, they are also able to create forms, in one case a house where they can both go, both together and individually. One realises that it is possible to create thought forms instantly in these realms, while the corresponding process takes time in the physical world. As Hermod puts it, 'we create a reality together with our imagination and that is real.'

At one point, Elleke has to decide inwardly whether she wants to die in order to be with Hermod (although she already is) but she chooses to continue life on Earth with her children growing up. Incidentally, the children show unusual wisdom in their comments on Hermod and the significance of his death - they themselves feel a corresponding pain. It is very hard for Elleke to live fully in two worlds at once, the physical world and the light of consciousness which is also love; and yet these two worlds are in fact one, just as they are two and yet one, growing together.

As human beings we are focused on the physical world, and we can narrow our understanding so as to shut out these larger perspectives on

reality. Elleke is able to draw the reader beyond their current understanding with an emphasis on being rather than doing and also an immense gratitude for the gift of life. Gradually, healing occurs and the beauty of life springs up anew. We gain a deeper sense of ourselves as co-creators in a multidimensional web of consciousness in which we are all linked. This book will deeply touch your heart while illuminating your mind to remind you of what you may have forgotten about life and its deeper meaning.

Transcending Trauma

Steve Taylor

HOPE FOR HUMANITY

Malcolm Hollick & Christine Connelly (SMN)

O Books, 2011, 455 pp., £14.99, p/b
– ISBN 978-1-84694-443-7

Human beings' relationship to trauma is remarkable in two ways: firstly, in our vulnerability to it. The human psyche is amazingly delicate and pliable, so sensitive that any exposure to stress or difficulty can damage it. And in the majority of cases, this damage is very difficult to heal. Particularly during childhood, a degree of trauma can affect us – even dominate us – for the rest of our lives, and even ruin our lives.

The second way in which our relationship to trauma is remarkable is in our propensity to inflict it on each other. All recorded history is a depressing saga of groups of human beings inflicting trauma on other groups – other classes, castes, ethnic groups, nations – through warfare and oppression. But perhaps even more depressing is the trauma that adults have routinely inflicted on children, through parental neglect or cruelty, or simply through brutal childrearing practices, or socially-sanctioned forms of violence such as genital mutilation.

The interweaving of these two factors means that trauma has always been a massive presence in human life. In this book, Malcolm Hollick and Christine Connelly, go even further: they suggest that trauma is the root cause of most human suffering, and is responsible for the present crisis of our civilisation.

Hope for Humanity is a book of massive scope, covering thousands of years of history, surveying cultures and societies across the globe, and journeying deep into the human psyche. Such 'macrocosmic' books can sometimes be dangerous – there's the danger of diletantism, of covering so much ground that you're

not able to investigate any area with proper scholarly thoroughness, and of the authors' being overwhelmed by their own material, and losing their bearings. However, Hollick and Connelly avoid this danger, partly by their ability to condense and summarise masses of information from different sources, and partly because the book is so clearly structured.

The early part of the book has a welcome historical perspective, normally absent from psychological research. Using my book *The Fall* as one of their sources, the authors suggest that early human beings were relatively free of trauma. When we lived as hunter-gatherers – in fact, the vast majority of our lifespan as a species – human groups were generally peaceful and egalitarian, and child-rearing practises seem to have been (at least judging by contemporary hunter-gatherer groups) benevolent and affectionate. Trauma became a real presence in human life following 'The Fall' – a cataclysmic cultural change which occurred during the 4th millennium BC, beginning in the Central Asia and the Middle East, when pathological traits such as male domination, hierarchy, oppression and constant warfare became the norm.

The central part of the book describes the various types of trauma which can affect us at different stages of our life. As the relatively new theory of epigenetics shows, trauma can be inherited; when it afflicts an individual, it causes biological changes which are then passed down through our genes. Trauma can also affect us before birth. Research has shown that a foetus can be damaged or traumatised by noise and arguments, or by the mother's stress, depression and loneliness, as well as physical problems. And of course, during infancy and childhood, vulnerability to trauma is massive, and probably the largest single source of trauma. As the authors point out, until the 20th century, child-rearing practices were routinely so brutal that probably every child was traumatised to a large degree. They quote the historian Lloyd de Mause: 'The further back in history one goes, the lower the level of child care, and the more likely children are to be killed, abandoned, beaten, terrorised and sexually abused.'

In my view, this is one of the most significant changes of the present time: that, in some parts of the world at least, childrearing has become much more benevolent. Practices like swaddling have been abandoned, physical violence to children is no longer socially acceptable; many mothers feed on demand and attend

to babies when they cry (instead of leaving them to 'cry it out'); and fathers are generally more involved with childcare. As a result, a new generation of less traumatised human beings is emerging – young adults whose psyches are comparatively undamaged, and who are therefore more able to build rich relationships and fulfilling lives. Hollick and Connelly suggest that it isn't as clear cut as this, citing research showing that child maltreatment is still common in developed countries. But surely there's no doubt that the *degree* of maltreatment has decreased.

This book is highly informative and readable, but that doesn't mean that it's a pleasurable read. One of my initial responses – especially to the central section of the book – was to feel anxious for my three young children. For a moment I felt almost guilty that I'd brought them into this world, where they can be traumatised so deeply and easily, from such a massive array of sources. I felt worried for their future - although at the same time determined to continue to do as much as I can to protect them from trauma, and to nurture them as positively as possible.

But at the same time Hollick and Connelly make it clear that the future isn't hopeless. The last section of the book is a wide-ranging blueprint for the transcendence of trauma, through personal development, therapy and social reform. The authors highlight the importance of reducing childhood trauma, partly through government initiatives to encourage good parenting. As individuals, we can increase our personal resilience, and develop resources to deal with traumatic events, including rituals or ceremonies for releasing tension. We can heal our traumatised psyches through meditation and therapies. On a societal level, the authors suggest measures such as community building, peace-building with processes of forgiveness and reconciliation, and emphasising partnership over competition.

I would argue that Hollick and Connelly don't give enough attention to the *positive* after-effects of trauma. Recent research into 'post-traumatic growth' has found that people often emerge from turmoil and trauma with an increased sense of appreciation, a wider perspective, increased confidence and deepened spirituality. In my own new book, *Out of the Darkness* – reviewed by Malcolm Hollick below – I tell the stories of over 30 people who underwent spiritual transformation after periods of intense turmoil. For them, turmoil and trauma were the catalysts for the

emergence of a new, higher and more integrated state of being.

Nevertheless, *Hope for Humanity* is an extremely impressive – even momentous – book, filled with an urgent desire to diagnose our sickness as a species and to offer healing to our damaged collective psyche. The era of trauma we have been living through over the last few thousands may only be a dark night of the soul, a phase of intense suffering which is slowly leading to collective 'post-traumatic growth' – transformation even – so that eventually we will emerge into a new, harmonious and integrated era.

Steve Taylor is the author of Waking from Sleep and Out of the Darkness.
www.stevenmtaylor.com

Awakening through Trauma?

Malcolm Hollick and
Christine Connelly

OUT OF THE DARKNESS

Steve Taylor (SMN)

Hay House, 288 pp., £10.99, p/b -
ISBN 978-1848502543

In his latest book, *Out of the Darkness*, Steve Taylor continues his exploration of the awakening or enlightenment process begun in *Waking from Sleep*. He uses his collection of case studies to illustrate and analyse how and why some people are transformed by traumatic experiences - often dramatically, suddenly and permanently. It's as if the old identity is blown apart, and a new person is born.

These new personas experience greater happiness and a deeper sense of connection to nature and people. As a result, their relationships become deeper, and they are more empathic, compassionate and altruistic. Ceasing to take their blessings for granted, they live more in the present. Losing their interest in materialism and success, they find life more meaningful and purposeful. With their heads less cluttered by mind-chatter, they are happy doing nothing or being alone. In many cases, they lose their fear of death, and may experience themselves as an integral part of a universe permeated by benevolent and meaningful consciousness.

Steve Taylor acknowledges that such transformations are not an automatic result, stating that: 'It goes almost without saying that the long-term effects of turmoil and trauma are usually profoundly negative.' Thus, trauma is two-faced. What most of us see and experience is the damaging

impact on individuals, families, communities and civilisation; the mental disorders, ill health, domestic violence, child abuse, sexual oppression, addiction, war, genocide and other consequences. Amongst the numerous positive cases cited by Taylor, it is easy to lose sight of this negative reality.

Taylor argues that intense turmoil causes the ego to collapse. In most cases, this results in a psychotic break, but for some it leads to the emergence of a new self. Such Suffering-Induced Transformational Experiences (or SITEs as he calls them) can break us loose from our desire for wealth, status, success and the many other attachments which form the building blocks of ego.

Breaking these attachments is painful, shattering our identity and leaving us empty. But when we face up to our predicament with courage, surrender to the inevitable, and accept our situation, a space is opened for a new self to be born. By contrast, transformation is blocked when we resist, and try to avoid, ignore or deny what is happening. Resistance may also be why the transformation sometimes fades with time as the old ego recovers.

Steve Taylor carefully distinguishes SITEs from religious conversions. He argues that most conversions happen to adolescent males, involve acceptance of a particular belief system and worldview, and do not last. By contrast, SITEs are more common amongst women and adults, do not require the adoption of specific beliefs, and are permanent. Conversion, he concludes, does not replace the ego, but supports it by bringing consolation and meaning to the isolated self, thus giving it hope for the future and a sense of belonging. Spiritual transformation, on the other hand, transcends the separate self and enables the higher self to be born.

Taylor also addresses the question of whether or not SITEs are psychological defences against traumatic life situations in which we create a more acceptable, but delusional, reality for ourselves. He argues that the transformation is actually progressive, not regressive, leading to greater integration and higher functioning than normal. Thus, it is not an evasion of reality, but a journey deeper into it.

Despite their transformative potential, Steve Taylor does not recommend seeking out traumatic experiences. Nor is asceticism, renunciation or other forms of rejection of the world the way to go. Rather, we should apply the lessons from his analysis of SITEs in our everyday lives. First, we should reduce our dependence on psychological attachments by identifying

them and consciously detaching from them. Although this brings feelings of insecurity and lack at first, he argues that in the long run it will create room for our true selves to grow.

A second lesson is that meditation and other spiritual practices such as mindfulness, yoga and tai chi are powerful ways to reduce the need for attachments and to heal the separateness of the ego. Service also softens the boundaries of the ego and enhances the sense of connection.

Finally, actively and directly facing the reality of death can release us from the anxiety and insecurity that arise from suppressing fear of it. We can do this in a few ways. We can imagine our own death, or deliberately live as if this were our last year. We can allow ourselves to feel fully the loss and grief when a loved-one dies rather than pushing it away. We can reflect on our mortality whenever we see a dead person or creature. And we can accompany dying friends on their journey, or become hospice volunteers.

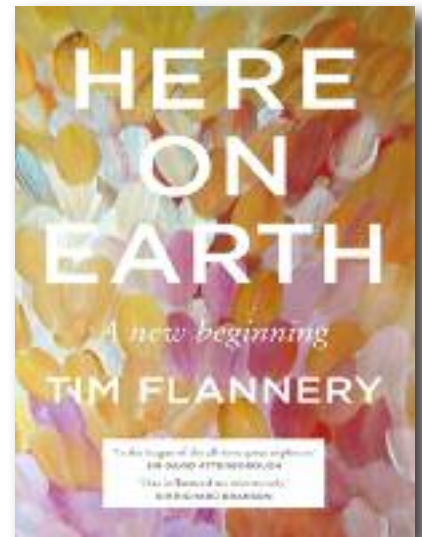
Taylor presents meditation as a purely benign and positive way to encourage awakening. But from our research and personal experience, we believe it is not without dangers. The ego structures which meditation can dissolve are partly built of defence mechanisms we adopt to contain traumatic memories. Breaking down those defences can release the trauma. As a result, meditators sometimes become emotionally and psychologically overwhelmed. They may dissociate or become temporarily psychotic, and, if the turmoil continues, can suffer long-term mental illness. If they repress the trauma again, they may become depressed, and possibly suicidal.

Stan and Christina Grof called such experiences 'spiritual emergencies', and established a Spiritual Emergency Network to support those affected. Emergencies may be triggered by many things besides meditation, including the Grof's Holotropic Breathwork which Steve Taylor mentions with approval. For some people, the issues that arise in meditation and other practices are simply too difficult to manage without assistance. Spiritual teachers often do not have an adequate understanding of the psychological processes involved, and the guidance of a skilled therapist may be needed in order to release trauma. We believe that the vast majority of us have buried traumas, and can benefit from therapy even if we function reasonably well. A good therapist can also help us become aware of our own behaviour patterns, and slowly dismantle our ego structure.

In conclusion, *Out of the Darkness* complements and balances the more

negative view of trauma presented in our own book, *Hope for Humanity*, which is reviewed above. We share Steve Taylor's belief that enlightenment is the normal human state, and that average consciousness is a subnormal, ego-driven condition. His suggestions for encouraging awakening, combined with our strategies for preventing and healing trauma, could transform human civilisation. We could move from a culture of domination, violence and destruction, to one of partnership, peace and respect for nature. *Out of the Darkness* is an important contribution to achieving this dream.

Malcolm Hollick is author of The Science of Oneness and co-author with Christine Connelly of Hope for Humanity.



species and cooperation or symbiosis between them, often in bizarre and amazing ways.

As Flannery says of his own body: '*billions of cells cooperating seamlessly at every moment and a brain made up of a reptilian stem, a middle mammalian portion, and two highly evolved yet relatively poorly connected hemispheres somehow add up to that thing I call me.*' It should be no wonder that some species, in particular ants and bees, have developed into collective organisms in which individuals operate almost as cells in a composite body such as Tim Flannery's.

Two other key players dominate the book. One is James Lovelock, the originator of Gaia theory. In a way that extends the idea of superorganisms of species into a superorganism of life in association with its physical environment, we have, in Lovelock's words '*a self regulating system made up from the totality of organisms, the surface rocks, the ocean and the atmosphere tightly coupled as an evolving system.*'

How Gaia actually works once provoked a sometimes acrimonious debate, but more than thirty years on Gaia theory has moved from the fringes to the centre of earth systems science. The vital question is the nature of self regulation and the delineation of its limits, and what happens when the limits are breached.

Enter the next key player in Flannery's book: Peter Ward of the University of Washington. The essence of what Ward has labelled the Medea hypothesis is that as living organisms and superorganisms (including human society) multiply until they reach environmental or other limits, so they can diminish or destroy themselves. This has happened innumerable times in history, and is part of the process of evolution. As Flannery says, '*... for*

ecology-futures studies

Gaia or Medea? The choice is ours

Sir Crispin Tickell

HERE ON EARTH: A NEW BEGINNING

Tim Flannery

Allen Lane, 2011, 316 pp., £14.99, p/b - ISBN 978-1-846-14396-0

First published in the *Financial Times*, Saturday 5 March 2011

How lucky we are to be alive, and indeed that there should be life. Here we are after 4.8 billion years on a fragment of rock, air and water spinning round a star in a galaxy of billions of other stars in a universe beyond limits. How could it have happened? Tim Flannery tells this extraordinary story from what is known of its beginnings to the problems which one animal species - our own - has created not only for other forms of life but also for itself. He brings together planetary history, evolutionary biology, his own practical experience and some sinister as well as encouraging thoughts for the future. His book is a triumph of interdisciplinarity.

There are key players throughout the story. Charles Darwin and Alfred Russel Wallace dominate the 19th century. It is good to see Wallace given the credit due to him as a somewhat wayward genius. Since then understanding of how evolution actually works has rapidly advanced: from the mechanisms of genetics, including epigenetics, to the linkage between competitive selection of

the brief moment that is the early 21st century, we strange forked creatures are perilously suspended between Medean and Gaian fates'.

For thousands of years the forked creatures which are humans were simply part of the natural animal world. Some varieties of them - the Neanderthals, the so-called hobbits of Flores, and recently identified the Denisovans - became extinct. Our own variety first survived a major crisis which greatly reduced its numbers, but in the last 100,000 years has spread all over the Earth. All modern humans are pretty close cousins.

The biggest change of all took place with the industrial revolution beginning some 250 years ago in Britain. Since then humans have profoundly affected the Earth and all life on its surface, and are doing so more and more every day. Hence the proposal from some geologists that the current geological epoch, the Holocene, which began with the ending of the last ice age some 10,000 years ago, should be followed by the Anthropocene, an epoch in which humans have become the dominant feature.

Flannery looks at both sides of the Gaian / Medean relationship. Its main features are human multiplication, changes to the chemistry of land, sea and air, exploitation of often irreplaceable resources, degradation of soils, proliferation of wastes, pollution of water, and destruction of the other living species on which we wholly depend.

Because we live short lives and many of us enjoy the current bonanza of consumption, things can look good, and the idea that we may face a Medean future seems unlikely and anyway repellent. But Flannery well brings out not only the dangers but also the effects of the law of unintended consequences.

There has been, he says, an unconscious war against nature: for example no-one foresaw the full effects of the release of nuclear radiation, the use of chlorofluorocarbons in reducing protection from ultraviolet radiation, the use of agricultural pesticides, the spread of such toxic metals as mercury, and the increase of greenhouse gases in the atmosphere. In almost every case natural human instincts of acquisitiveness, fear of the unknown and preference for the easiest option have pushed things in the wrong direction. Putting them right, not only for humans but for other organisms, is extraordinarily difficult.

So what should happen next? There is a long and depressing list of things which need doing as soon as possible. Nearly all require us to think differently. Underlying most is

the need to measure things differently so that the true costs of our actions, including externalities, are brought in. This means putting market forces into a framework of the public interest, and escaping from current obsessions about economic growth and consumption (our society has been well called the consumptive rather than the consumer society).

If we are to avoid an eventual Medean-type collapse, we obviously have to limit our numbers, as may be beginning already; go for different energy policies, also on the way; manage more sensibly what has been called the natural capital of the Earth; and establish the right kind of institutions for coping with global problems in what is increasingly a global society.

This means more respect not only for the environment but also for the other creatures within it. There are some who still think that essentially we can carry on as we are, and that technology will always solve our problems. As Flannery well shows, there is little evidence to support this view. He gives examples of some dotty technologies which were fortunately not developed in the past. New technology can sometimes create more problems than it solves.

One issue that Flannery does not take fully into account is the effect of the current electronic revolution on human communication, and beyond that the functioning of the brain. How and to what extent will our brains be left behind by computers? Do we face what has been called a singularity by the middle of this century in which non-biological intelligence will be immensely greater than all human intelligence put together?

This is a well written, persuasive and at times alarming venture into past, present and future. It may be easy to read but it is not always comfortable reading. It deserves to be widely read.

Sir Crispin Tickell is Director of the Policy Foresight Programme at the James Martin 21st Century School in Oxford.

A Stitch in Time?

David Lorimer

WORLD ON THE EDGE

Lester Brown

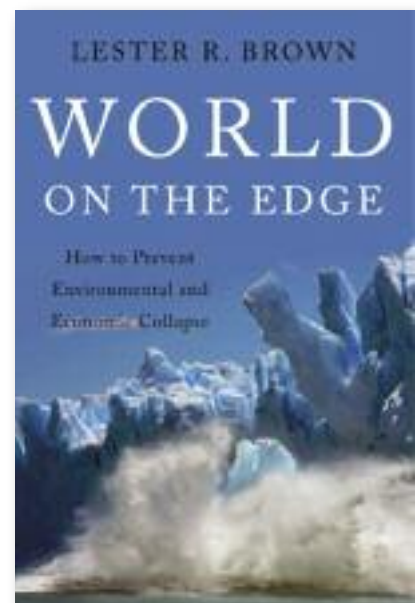
Norton, 2011, 240 pp., \$15.95, p/b – ISBN 978-0-393-33949-9

Many readers will be familiar with Lester Brown's previous work on eco-economies, including his books on Plan B, now in version 4.0. This is his latest and most concise book

which is essential reading for anyone wanting to gain an overview of our current environmental situation and how we can set about remedying the deep-rooted and systemic problems that we have created. He is the world's leading commentator and brings together both incisive analysis and comprehensive data. You can also subscribe to his Earth Policy updates at www.earthpolicy.org where the background data for this book are also available.

People are increasingly aware that we are facing a perfect storm of food shortages, water scarcity and expensive oil - much of the debate centres around exactly when this will happen. The extreme climate events in Russia and Pakistan last year are a foretaste of climatic disruption of food systems. Russian grain yields were cut by 40 million tonnes to 60 million tonnes, while 6 million acres of crops were destroyed in Pakistan, and over 1 million livestock drowned. The first event is consistent with predictions of global warming, while the second was effectively a man-made disaster. Forest cover in Pakistan has been reduced from 30% in 1947 to 4% now, so there is very little to prevent run-off turning into floods. In addition, there is huge pressure from a population of 185 million. Despite this, Pakistan has chosen to prioritise military rather than environmental security. In the course of this century, we will realise how closely these two aspects of security are linked.

The book is structured in four parts: the first, a deteriorating foundation, catalogues falling water tables, eroding soils, shrinking harvests, rising temperatures and melting ice, all of which are related to food security. The second part spells



out the consequences of the emerging politics of food scarcity, the rising tide of environmental refugees, and mounting stresses leading to failing states. The response is Plan B, with four central components: cutting carbon emissions by 80% by 2020, stabilising population at 8 billion by 2040, eradicating poverty and restoring the Earth's natural systems and resources in terms of forests, soils, aquifers and fisheries.

These issues are all interrelated, indicating ecological overshoot and potential collapse. This means that we are in a race between natural and political tipping points. So far, we are heading for a natural tipping point bringing about a series of emergencies which we can anticipate but cannot precisely predict. Brown envisages wartime mobilisation, showing that we have the capacity and the necessary funding to carry out his plan - but we will not move into a wartime mentality until we experience a series of climate related catastrophes, by which time it may be too late to mitigate the situation - we may just have to adapt. The costs are modest - under \$200 billion a year - when compared with a military budget of \$1.5 trillion. This is just 12%. It seems as if we are prepared to adopt the precautionary principle in military affairs but we have not yet extended this to the environment on which our biological security ultimately depends.

The three main drivers of a growing demand for food are population growth, rising affluence and corresponding increases in consumption of meat, milk and eggs. Add to this is the demand for biofuels, already absorbs a quarter of US corn production. Countries like China are also buying up land elsewhere on the planet, partly to grow biofuels. As might be expected, China is now the largest market new car sales, and this in itself, combined with further industrialisation removes further productive land as roads and car parks are constructed. China and India also have a total of 325 million people whose food is dependent on unsustainable use of water from underground aquifers.

A specific example of changing patterns of demand is world soya production, which has grown from a mere 17 million tonnes in 1950 to 252 million tonnes in 2010. In 1995, China both produced and consumed 14 million tonnes of soya, but by 2010 this demand had increased to 64 million tonnes, representing half the world's soya bean exports.

Brown's Plan B is both comprehensive and workable. The goals he spells out are conceptually simple and easy to understand, but

politically hard to achieve. A first step is to become better informed about our challenges and the solutions he proposes, and then to press our political representatives to begin to think through and apply some of the policy implications. Nothing less than the future of civilisation is at stake - many previous civilisations have collapsed by eroding their environment base, and ours will be no exception if we do not wake up to the urgency of these challenges in time.

Defusing the Population Bomb

David Lorimer

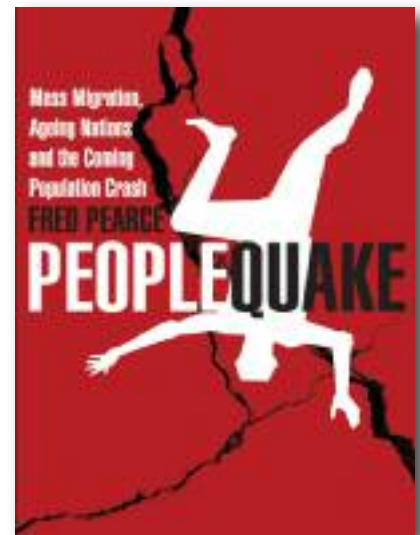
PEOPLEQUAKE

Fred Pearce

Eden Project Books, 2010, 342 pp., £12.99, p/b - ISBN 978-1-905-81134-2

The subject of population often comes up at party conversations about the environment. However, very few people are aware of all the dimensions of this issue, focusing principally on growth in numbers in developing countries. What really counts is the overall impact of humans on the environment, which can be expressed through an equation formulated by Paul Ehrlich in the late 1960s, namely that impact is a function of population times affluence (or consumption) times technology ($I = P \times A \times T$). In this sense, consumption turns out to be far more significant than absolute numbers when one considers that the impact of one American is the equivalent of 40 Africans. So economically developed countries also have a population problem when one thinks in terms of impact.

Projections for maximum human population have actually been coming down over the last 20 years. UN figures for the early 1990s indicated a maximum of between 12 and 14 billion, while the latest estimates indicate 9.5 billion by the mid to late 21st century, other things being equal. These numbers conceal very different trends. Most of the population increase will take place in Third World countries, and a lot of that in cities and slums. The current slum population of 1 billion is expected to rise to 2 billion by 2050. Already, for the first time, more than half the human population lives in urban environments. In Europe, on the other hand, indigenous populations are way below replacement fertility rates, so Europe's share of world population will continue to diminish. And their



economies will require further migrant labour in order to be sustained at present levels. The same will apply to relations within countries, where different ethnic groups have varying fertility rates. Africa's share of the world population will increase substantially.

It turns out that the main driver of these social changes is the transformation in the role of women. This is obvious in developed economies where women are playing a much more active role and postponing having families into their 30s while establishing their careers, then rarely having more than two children. However, similar attitudes are spreading to places like Pakistan and Bangladesh, where young women also express a preference for smaller families. This represents a shift away from patriarchal structures towards self-determination by women who are playing the most active role in contraception. There are widespread policies encouraging sterilisation, and overall this means that there is more sex with fewer babies, representing what has been called a reproductive revolution.

Pearce cites some specific examples of population decline in Europe, for instance in the former East Germany and Russia, where the life expectancy among men has fallen to 59, and the population is expected to contract to 103 million by 2050. This will have considerable economic and political repercussions. At the same time, the population of Yemen, which was 5 million in 1950, will also have risen to 103 million by the same date, if the effect of water shortages can be circumvented. These population declines also mean an ageing population - the world's women are having too few babies to sustain present populations, and this may even lead to a population implosion. In some places, there are only 300 women of childbearing age where

there were 1,000 a generation ago. The indigenous population of Europe could halve by mid-century and the population of Italy could crash from 58 million to only 8 million. This will inevitably mean people working longer, but at the same time modern technology is blurring the distinction between work and the rest of life.

In the meantime, we will still have to feed a rising population on a diminishing environmental resource base, about which Pearce has written an excellent book, *When Rivers Run Dry*. It is popular to observe that the Green Revolution defeated Paul Ehrlich's predictions of widespread famine, but we still have 1 billion severely undernourished in our current system, and these people are particularly vulnerable to rising food prices as they have to spend a much larger proportion of their income on food – hence the danger of food riots leading to political instability. But there are also signs of hope – millions of trees are being planted worldwide, which combats erosion and provide shelter from the wind as well as fodder for livestock.

The last part of the book looks at the implications of the longevity revolution under the banner 'older, wiser, greener'. By 2050, there will be 1.5 billion people aged over 65 in the world, 1.2 billion of whom will be in the developing world. We have to transform attitudes from the old being a burden to looking on them as a resource. The future in the next century should be one of low mortality and low fertility after the world as a whole has passed through the demographic transition. However one factor is missing from Pearce's analysis, namely the effect of obesity on life expectancy- the US has moved from 21st to 40th in the longevity league in the last ten years. The old can only be a resource if they are healthy. This book will certainly transform your understanding of population issues.

Sustainable Protein

David Lorimer

THE MEAT CRISIS

Joyce D'Silva and John Webster (eds)

Earthscan, 2010, 305 pp., £19.99, p/b – ISBN 978-1-84407-903-2

In the introduction to this important book, the editors sum up our situation by saying that we eat too much meat for our own good health, too much for the dwindling global resources of land and water, too much for the health of our planet's climate and environment and too much to enable the animals we eat to have decent lives before we

devour them. Total meat consumption has risen from 44 million tonnes in 1950 to 240 million tonnes today; it is anticipated to rise further to 376 million tonnes by 2030 and 465 million tonnes by 2050. Already, more than a third of total grain consumption is fed to animals, including 50% of wheat and 90% of soya. This has come about through the intensification of the production in concentrated animal feeding operations (CAFOs) which now account for 40% of global meat production. Here the animals are fed a grain-based diet and put on weight far more quickly. A 500 lb calf can be grown to 1,350 lb in four months, while the same animal would take two years to reach 1,100 lb if fed on grass.

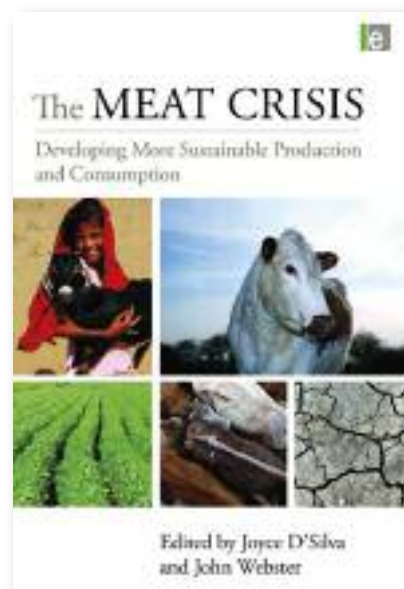
The projected rise in consumption can only mean a further intensification of already problematic production methods. Not only does the livestock industry contribute an estimated 18% of greenhouse gas emissions, but the waste emanating from these operations is staggering and poorly managed. A pig produces 3 gallons of faeces a day. In addition, some of this waste runs off into rivers that flow into the sea and help create dead zones in which no fish can live. This book is the single best guide to the issues and can be highly recommended. The five parts look at the impact of animal farming on the environment, farming practices and animal welfare, the implications of meat production for human health, ethical and religious approaches to animal foods, and finally the challenge of devising farming and food policies for a sustainable future.

I have spent part of the last few months co-authoring a book called *The Protein Crunch*, and have therefore been steeped in environmental issues. Readers can appreciate from the figures given

above that the forecast increase in the consumption may be neither sustainable nor attainable. The main drivers are Chinese and Indian middle classes moving up the food chain and wanting to eat not only more meat but also more fish. This has already produced considerable effects in world markets. Only 15 years ago, China was self-sufficient in soya, but it now has 500 million of the 900 million pigs on the planet, which each a soya-based grain diet where the soya has to be imported from Brazil. This in turn is correlated with the destruction of rainforests firstly for cattle and subsequently for soya production. For other environmental reasons connected with land and water, it is going to be difficult to increase grain production sufficiently to cater for a near doubling of meat consumption by 2050. It takes 1,000 litres of water to produce a kilo of grain and between 15 and 24 kg of grain to produce a kilo of beef. So producing a kilo of beef can take up to 24,000 litres of water. Moreover, people in many Western countries, principally the USA, are eating far too much meat for their health and could be encouraged to reduce consumption. But as Jonathon Porritt points out, encouraging people to eat less meat will be politically problematic since it is so closely associated with rising aspirations and living standards.

The chapters on welfare set out the minimum acceptable standards, and demonstrate that most CAFOs failed to live up to these and are able to disregard many environmental regulations connected with waste disposal. Further competition and intensification will encourage them to cut more corners, with potentially disastrous results. It is already clear that industrial production of animals has led to the emergence and spread of diseases in human populations. The chapter on chickens shows a similar process of intensification with animals bred for large breasts scarcely able to stand after five weeks. Again, the competition in this industry is intense, and animals now reach a greater weight in less time than ever before. So one can understand why risky practices emerge, but it is incumbent on governments to impose the necessary regulations.

It is clear that animals are now competing with humans for the available grain supply, a situation exacerbated by the fact that a quarter of corn production in the US is now devoted to ethanol. So this means that cars are competing with humans as well. With lower overall consumption of meat, it would be easier to feed the planet. The current



food system is neither sustainable nor fit for purpose in that 1 billion people are on the edge of starvation and over 1.3 billion are overweight, a figure that is rising rapidly. So the same system that produces absolute undernutrition also produces overconsumptive undernutrition due to rising consumption of junk foods. In this respect, the food industry has a great deal to answer for, but the bottom line is profit and if people continue to buy these addictive substances, the companies will continue to make money. At a more fundamental level, it turns out that the short-term orientation of capitalism is not compatible with long-term sustainable agriculture. This book will give you a much better understanding of the role of meat in the bigger picture.

general

The Story of Success

David Lorimer

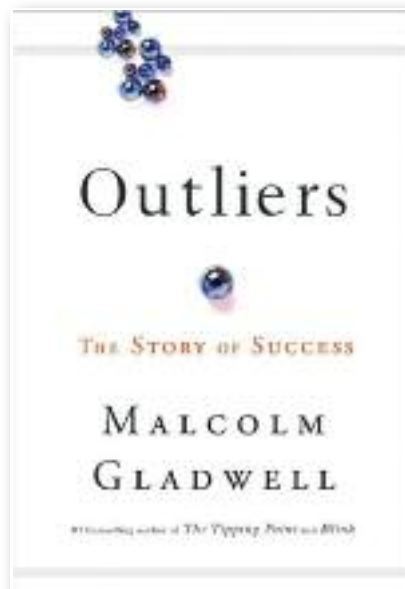
OUTLIERS

Malcolm Gladwell

Penguin, 2009, 309 pp., £9.99, p/b
-ISBN 978-0-141-03625-0

Readers of Malcolm Gladwell's previous two books, *The Tipping Point* and *Blink* will know that he is a master storyteller, and this book is no different. The key factors of success have been studied for about 100 years, and the process was initiated through Andrew Carnegie, who made all his contacts available to a young journalist, Napoleon Hill, whose book *The Law of Success* first appeared in 1925, and detailed 16 principles of success resulting from around 15,000 interviews, including leading industrialists, inventors and politicians of the time. Since then, a large literature has developed and there is considerable agreement on the importance of qualities like perseverance, courage and determination.

However, Malcolm Gladwell takes a different tack in this study, asking if people who achieve so much more than others are really more outstanding, or whether there are other important factors to take into consideration. In his first chapter he highlights an anomaly where junior sports teams tend to consist of students born earlier in the year - they are therefore older and more mature. This does not mean that in the long run they will actually be better. He argues that there is more to personal success than individual



merit, and that outstanding people are also 'invariably the beneficiaries of hidden advantages and extraordinary opportunities and cultural legacies that allow them to learn and work hard and make sense of the world in ways that others cannot.' Thus it makes a difference where and when we grew up, and the legacies of previous generations can also shape patterns of achievement. In this connection, Gladwell shows that the richest and most successful Americans of the late 19th century were all born around 1835, and thus had unique opportunities available to them in the 1880s and 1890s. The same applies to a small number of key players in the computer world like Bill Gates and Steve Jobs, who were born in or around 1955.

Apart from cultural legacies, outstanding individuals also work harder: Gladwell formulates the 10,000 hour rule and shows how it applies in a variety of fields. Bill Gates spent 10,000 hours programming computers, chess players and musicians have to put in a similar amount of time. One study showed that amateur musicians had clocked up 2,000 hours by the time they were 20, while their professional counterparts steadily increased their practice time every year and reached 10,000 hours by the same age. The Beatles also exemplify the principle with the huge number of performances they undertook in a nightclub in Hamburg.

Part of the process of what Gladwell calls a steady accumulation of advantages is the 'concerted cultivation' of their children practised by middle classes, who invested great deal of time ensuring that they are exposed to a wide variety of opportunities and pursuits. IQ on its

own is not enough, but needs to be accompanied by practical intelligence. There is a fascinating chapter following the progressive rise of many Jewish immigrant families who came to the United States in the 1890s. Typically, they arrived with an artisanal skill such as tailoring, which they found a way of making into a small business in the first generation. The second generation continue and expand the business, while the third generation becomes part of the professional class as doctors or lawyers. This is not to minimise the importance of being clever, ambitious and hard-working, but rather to point out the role of 'a predictable and powerful set of circumstances and opportunities.' Individual examples can overstate the case, since there must be other people with similar circumstances and opportunities who do not in fact succeed to the same extent.

In another fascinating chapter, Gladwell explains how Asian children have a built-in advantage in learning maths because of their language. In addition, culture plays a significant role as the Chinese are used to putting in a very long hours in the fields. In an innovative educational initiative called the KIPP Academy, students come from challenging backgrounds and perform exceptionally well at maths. They are taught to apply a protocol called SSLANT, which means smile, sit up, listen, ask questions, nod when being spoken to, and track with your eyes. The school has been very successful at closing the achievement gap, and it is interesting to find out that the reading capacity of working-class children goes down during the summer, while that of middle-class children continues to go up as they read during the holidays. So where children learn nothing when school is not in session, which is an interesting argument for shortening holiday periods. Here another cultural factor comes in: the school year in the US is 180 days, while in South Korea is 220 and in Japan 243. This is bound to make a difference, and is one of the factors behind the success of KIPP. Students start early and attend class for 2 days a week during the summer. It will be very interesting to follow this cohort in later life. They acquire at an early age the habit of working hard and effectively. Ultimately, success means taking advantage of the opportunities on offer. This is a provocative and stimulating book which gives the reader a fuller and more nuanced understanding of the circumstances that can enable success.

A New Political Story

David Lorimer

A WISER POLITICS

Jean Hardy (SMN)

O Books, 2011, 211 pp., £12.99, p/b
– ISBN 978-1-84694-567-0

As the political process has become increasingly managerial and parties have tended to move to occupy the middle ground, ideas and values have become less important than competence. A wider vision and deeper understanding represented by earlier ways of thinking and feeling encourages us to reconnect with the Cosmos and the Earth. The word cosmopolitan comes from a combination of cosmos and the Greek term *polis*, and now needs to be redefined. The book falls into three parts, the first dealing with political myths and philosophies originating since the 16th century, while the second analyses elements largely missing from current political discourse, namely the feminine, indigenous knowledge, the natural world and its creatures, the numinous, the child and the self. Then the third part offers a more comprehensive myth of politics in the light of what is missing.

The overall view of the nature of humanity informs political thinking, so Machiavelli, Hobbes and Burke all sought ways of controlling human disorder represented by sin as an inherent quality. Following on, Locke, John Stuart Mill and Friedrich Hayek represent the rise of individualism and capitalism as usury was decriminalised and economics gradually came to occupy a central place. A different stream of thinkers

prioritised equality and socialism, while the rise of Darwinism emphasised our competitive nature, even though Darwin himself had plenty to say about love and co-operation, a theme elaborated by Kropotkin in his famous book *Mutual Aid*. Darwin's co-discoverer Wallace held much more radical views and believed in the possibility of spiritual as well as social evolution. Romantic thinkers beginning with Rousseau held that the human being was free by nature and subsequently repressed by society. Jean makes it clear how important these underlying assumptions about human nature are and that we need to consider the nature of collective consciousness.

The thinking in this first part is dominated by men, with the exception of Mary Wollstonecraft. Non-Western races are regarded as inferior, as yet untouched by Progress. There is little regard for the natural world, even if Darwin's thinking encouraged us to view human beings as situated within nature. Then there is the rise of secularism and rationalism in the Enlightenment and a general ignorance about the effect of upbringing on later adult development. Jean fills in these gaps, drawing on the important work of Riane Eisler and highlighting the way in which feeling is largely excluded at the expense of thought. Anthropology began to develop in the late 19th century, so we now know far more about other peoples than we did and are less arrogant in our outlook. It is curious to reflect that even people like Sir JG Frazer uses words like 'primitive savage' to describe indigenous people. Another significant development is the re-

emergence of the idea of nature as a living organism through the Gaia hypothesis and an increasing scepticism about purely mechanistic thinking. All this was prefigured by 19th-century German thinkers such as Goethe and Schelling, and also finds expression in the American transcendentalists like Emerson and Thoreau. The environmental movement is only 40 years old and still has to take its place at the very centre of politics.

In the third part, Jean reviews theories of human nature from Hinduism and Buddhism as well as Meister Eckhart and modern thinkers like Jung and Teilhard de Chardin. Her message is one of a journey towards wholeness based on individuation and integration of complementary qualities. Politics can also become more conscious by being more aware of the shadow and the tendency to be projected. Our highest aspirations have yet to be translated into politics, and it is not clear how a transformation of consciousness might impact on our institutions. In the first instance, we need a wider public debate about the scope and potential of human nature and values. Gender roles are already being redefined, but structures have yet to evolve in a corresponding fashion. Gradually, however, a planetary understanding of our role is emerging and along with it a planetary consciousness and a planetary ethic. Jean has made a valuable contribution to this essential reorientation towards a wisdom society. If your political thinking needs refreshing and extending, then this wide-ranging book is a valuable resource.

**Brahma**

If the red slayer think he slays,
Or if the slain think he is slain,
They know not well the subtle ways
I keep, and pass, and turn again.
Far or forgot to me is near;
Shadow and sunlight are the same;
The vanished gods to me appear;
And one to me are shame and fame.
They reckon ill who leave me out;
When me they fly, I am the wings;
I am the doubter and the doubt,
And I the hymn the Brahmin sings.
The strong gods pine for my abode,
And pine in vain the sacred Seven;
But thou, meek lover of the good!
Find me, and turn thy back on heaven.

Ralph Waldo Emerson