

Paradigm Explorer

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HRH The Prince of
Wales 70th Birthday
Conference



The Scientific &
Medical Network

2019

NETWORK CALENDAR

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| June 4 | Evening with Lama Dr Alan Wallace and Dr Peter Fenwick, chaired by Dr Paramabandhu Groves, St Thomas' Hospital – <i>A Key to Mental Resilience – a Meaningful Life</i> |
| July 6-7 | Annual Meeting, Horsley Park – <i>The Future of Consciousness Studies</i> , Dr Vasileios Basios, Prof Max Velmans |
| September 27-30 | <i>Beyond the Brain – a Paradigm Shift in Science?</i> Mayne Island Resort with David Lorimer, hosted by Diana Clift |
| November 2-3 | <i>Beyond the Brain 2019</i> , University of Westminster. Speakers Ken Wilber (Zoom), Prof Betty Kovacs (US), Prof Marjorie Woollacott (US), Dr Steve Taylor, Dr David Luke, Dr Rupert Sheldrake, Amanda Feilding, Prof Stephen Braude (Zoom) – see www.beyondthebrain.org |
| November 30 | <i>Evolving Consciousness: Spiritual Sight and the Meaning of Alienated Times</i> , Colet House. Speakers TBC, sponsored by the Fetzer Institute |

LONDON - CLAUDIA NIELSEN – 0207 431 1177 or preferably email claudia@pnielsen.uk

We meet at 38 Denning Rd NW3 1SU at 7 for a 7:30pm start. Nearest tube station is *Hampstead* (Northern Line) or *Hampstead Heath* (Overground). Cost is £10 for members and £12 for guests. Please confirm attendance so I can anticipate numbers. Friends and non-members are always welcome.

For more comprehensive information on presentations (to include synopsis and biographies) plus summaries of past ones, go to the *London Group* page of the SMN site at www.scimednet.org.

Please note that sometimes talks have to be rescheduled and information is sent via email so even if you are not in London but would like to be kept informed of changes, please send me an email and I will put your address on the circulation list.

| | | |
|-----------|-------------|---|
| MAY | Monday 13th | RUPERT SPIRA – The Nature of Consciousness |
| JUNE | Monday 17th | CHARLIE MORLEY – Lucid Dreaming: transformation while you sleep |
| AUGUST | Monday 12th | DANIEL STONE - Harmonic Resolutions 12, Science, Business, Spirituality & Healing |
| SEPTEMBER | Monday 9th | Prof RAVI RAVINDRA – Inner Transformation through the Yoga of the Bhagavad Gita |

The Cascadia Conference of the Scientific and Medical Network Mayne Island, BC, Canada

26th–30th September 2019

David Lorimer presenting Beyond the Brain: A Paradigm Shift in Science?

More and more scientists from all disciplines are questioning the orthodox view that consciousness is reducible to matter. Could it instead be a fundamental feature of the Universe? David Lorimer will present the evidence base. This conference will be a combination of academic and experiential sessions, with plenty of opportunity for the participants to contribute, socialise and enjoy the stunningly beautiful ocean front setting of the Mayne Island Resort.



The Scientific &
Medical Network

BEYOND THE BRAIN 2019

University of Westminster
November 2-3

Speakers

Ken Wilber (USZoom), Prof Betty Kovacs (US),
Prof Marjorie Woollacott (US),
Dr Steve Taylor, Dr David Luke, Dr Rupert Sheldrake,
Amanda Feilding, Prof Stephen Braude (US,Zoom) –

See www.beyondthebrain.org



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Notice to Contributors

All proposed contributions should be sent to the Editor by email as a Word and/or PDF file.

For further guidelines please email:
dl@scimednet.org

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Editor: David Lorimer
2 Chemin de la Chaussee,
11230 St Colombe sur l'Hers,
France

E-mail: dl@scimednet.org

Web Site: www.scimednet.org

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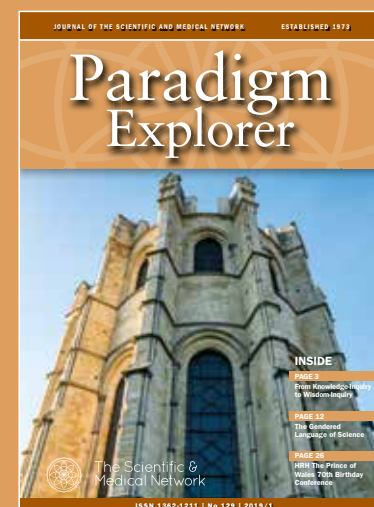
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Paradigm Explorer
Registered office:
151 Talgarth Road,
London W14 9DA

Tel: 0203 468 2034.

Email: info@scimednet.org

Company limited by guarantee,
registered No. 4544694 England
Registered charity No. 1101171 UK



Cover: Canterbury Cathedral,
Will Parsons



Institutions & Tipping Points

From Dr Paul Filmore, Chairman chairman@scimednet.org
Forum: Editorial (Please comment via the members' website)

The last month alone has seen numerous dramatic announcements, in an ongoing series of wakeup calls for humanity to evolve or suffer the consequences. There have been so many individual news items on or around climate change that I'm sure many people are scared stiff, due, in part, to the sensational manner in which the news is reported. Among the most prominent reports is the open letter from the Bank of England governor Mark Carney and France's Central bank governor François Villeroy de Galhau, which sets out the dangers to the global economy. Of the three climate-related financial risks that companies, banks and governments need to fight against, the one I wish to highlight is associated with transition: 'for example, when a business moves away from carbon-intensive industries and technologies in a "sudden or disorderly" way, their business models and asset valuations can end up taking a hit' (1). What may be being alluded to here is the destabilisation of businesses, in other words, our institutions, rather than merely a readjustment based on monetary values. A different form of wakeup call (apart from the RSPB saying that we have lost 40 million birds in the UK in the last fifty years), has been the intentionally shocking David Attenborough film, 'Climate Change - The facts' (2), which has been widely reported and stands as a beacon call for change. If you have not seen it then do prepare yourself before visiting iPlayer.

A wakeup call, but perhaps less directly connected, has been the major fire at Notre Dame Cathedral in Paris. I, amongst millions of viewers, watched live on television as the cathedral burnt. This was for me an emotional experience, since I have visited the cathedral many times, attended services, and have been moved by hearing the sound of the cathedral bells echoing through the streets. The response to the fire over the next few days was extraordinary, as money was donated (amounting to over £0.65 billion), well over the estimated rebuilding cost (and without there having been the loss of life or injury). This reaction I believe was due to the potential loss of something personally precious, but until that moment of potential loss, unrecognised as important by many people. The cathedral represents a different type of institution, which can be irreplacably lost with ease. And yet, do we see this reaction in other losses, for example, the Grenfell fire 14/6/17 where £29M raised (3) for the 72 people who died and 70 injured, or, as mentioned above, for 'saving our planet' after seeing the David Attenborough film?

I recall watching a film 'Goodbye to Canterbury' by the previous Archbishop of Canterbury, Rowan Williams (5). It is not available at present, but a Guardian review of the film quotes Rowan Williams as reflecting:

"Institutions develop because people put a lot of trust in them, they meet real needs, they represent important aspirations, whether it's monasteries, media, or banks, people begin by trusting these institutions, and gradually the suspicion develops that actually they're working for themselves, not for the community. At the end of the middle ages, nobody would ever have expected the monasteries to vanish from the scene within a generation – yet they did, change does happen." (6). I remember clearly this sub-text of the film from back in 2013, Rowan Williams warning that institutions which we take for granted, even the present day Church of England, are fragile to external change (including change of perception). They can suddenly disappear. But is this not to be expected? We saw during the banking crisis that governments went to extraordinary lengths to prop up banks i.e., the institution of the bank, with enormous amounts of money, far more than would have been needed to pay off all third world debt at that time, which we had all been told was impossible!

I feel these dramatic occurrences are a wakeup call to the sleeping majority of averagely complacent people on our planet, waking up to the potential loss of 'institutions' i.e., basic building blocks of assumed constants within our psychological makeup (from birds, to the polar bear, to Woolworth's & BHS, to full supermarket shelves of food and plentiful water). Some people have heard and woken up to the challenges, but it seems as usual as though it is only those who may be directly affected that are engaging. So in reaction we have seen school pupils with their climate strikes (4) and the recent 'Extinction Rebellion' protests. This is a difficult time for those who are awake to these issues, including SMN members. We need to realise that the sensationalist approach is instrumental in helping to alert the majority to a problem in the first place; it can facilitate the first step on the path to change. Often personal growth and change comes from being in a safe place and having space and time to reflect, and there just isn't the time for this now!

Will comprehensive institutional change happen again, such as happened in the banking crisis, but this time stimulated by the impending effects of climate change? I would like to think that people, who constitute institutions, can change, but watching the Swedish teenager Greta Thunberg talking to dumbstruck ministers and MPs, I fear not! The young come with potentially changeable mind-sets and have not lived for so long in a predominantly selfish world, and so can change, but will this be in time? We as SMN members can help and support the young with our knowledge and experience. In addition we have many resources and a good

track record in organising innovative talks and lectures. We must, however make sure that we move with the times and that our events are not a one-way communication, but involve interactive elements that gather participant comments and conclusions in an ergonomic and contemporary way. The outcome of meetings can then provide a valuable publishable consensus with appropriate follow up actions. Again, on changing mind-sets, our Galileo project, with the emphasis to help facilitate the transition from a science based on a materialist worldview, to an *expanded science based on a spiritually informed worldview*, will, I believe, promote necessary areas of change. Our journal Paradigm Explorer will continue to publish insightful and relevant articles. In this journal, appropriately, the opening article, by Nicholas Maxwell, focuses on why a global crisis has occurred and offers his analysis of a way forward. Finally, we are putting work into developing talks and experiential workshops for younger participants (starting with undergraduate and postgraduate focus). The last Mystics & Scientists had a strong theme on social media and its dangers, and attracted a significantly younger audience. In addition, from the 1st May, Lana will be organising a monthly series of meetings for graduates and postgraduates to discuss SMN areas, their own research, and becoming members. The list above, though not exhaustive, shows we have a number of current initiatives supporting change, and I hope you can help by supporting us in this work.

References:

- [1] BBC News, Climate change: Central banks warn of financial risks in open letter, <https://www.bbc.co.uk/news/world-47965284>, 17/4/19
- [2] 'Climate Change – The Facts', film, David Attenborough (iPlayer until ~17th May) <https://www.bbc.co.uk/iplayer/episode/m00049b1/climate-change-the-facts>
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- [4] School Climate Strikes: For example: Observer editorial, 17/3/19, <https://www.theguardian.com/commentisfree/2019/mar/17/observer-view-on-schools-climate-strike>
- [5] Rowan Williams (Archbishop of Canterbury 2003-2012), 'Goodbye to Canterbury', BBC2 film, shown 1/1/13
- [6] Kennedy, M. (2012) 'Rowan Williams says goodbye to Canterbury in BBC documentary', <https://www.theguardian.com/uk/2012/dec/28/rowan-williams-goodbye-canterbury-bbc>



From Knowledge-Inquiry to Wisdom-Inquiry:

A New Paradigm for Academia

Nicholas Maxwell

Harald Walach's *Science Beyond a Materialist World View* argues that science cannot proceed without metaphysical presuppositions about the nature of the universe. These presuppositions tend to be taken for granted by the scientific community, but in an implicit way, without critical discussion. Walach argues that if these implicit presuppositions were made explicit, and laid open to critical appraisal and discussion, a broader kind of science might emerge, one that could do better justice to the miracle of consciousness, and to the grave global problems that confront us. "We might be able" Walach remarks "to create an extended way of doing science that is both more humane and more powerful in serving the needs of our planet as a whole". As it is, as a result of failing to make explicit and discuss its presuppositions, science proceeds in too narrow a way. "It neglects and largely rejects other avenues such as inner experience as reported in spiritual traditions or whole systems of introspective psychology, such as Buddhist or indigenous ways of gaining knowledge through participation in altered states of consciousness".

Some of this gets things absolutely right; but some of it, in my view, profoundly misses the point.

I wholeheartedly agree that science cannot do without metaphysical presuppositions.¹ There are profoundly problematic assumptions concerning metaphysics, values, and even politics (having to do with the social use of science) inherent in the aims of science. We need a new kind of science that makes explicit these somewhat implicit problematic assumptions so that assumptions and associated methods – aims and methods – of science can be improved as science proceeds. For decades I have argued for such a conception of science (which I have called aim-oriented empiricism) that represents problematic aims in the form of a hierarchy of aims, and facilitates the improvement of aims as science proceeds.²

Broadening the issue

But when Walach goes on to argue that we need to broaden science I cannot help but think that is missing the point. What we really need – desperately urgently – in

my view, is a transformation of academic inquiry as a whole so that our problems of living are put at the heart of the enterprise, social inquiry takes up its proper task of promoting cooperatively rational tackling of conflicts and problems of living in the social world, and the basic aim becomes to help people realise what is of value in life – help humanity make social progress towards a good, civilised, enlightened world. *The scientific pursuit of knowledge needs to be an integral, subordinate part of academic inquiry devoted to seeking and promoting wisdom – wisdom being the capacity, the active endeavour and the desire to realise (experience and create) what is of value in life, for oneself and others.* What we need is a kind of academic inquiry rationally designed and devoted to helping people learn how to live – not just acquire knowledge, however much broadened to include consciousness and the human soul.

This is a message that I have been propounding now for over 40 years – ever since my first book *What's Wrong With Science?*, first published in 1976, and

certainly since my second book *From Knowledge to Wisdom*, first published in 1984, which spelled out the argument in detail.³

The global crisis

It is increasingly dawning on people that we are confronted by an unprecedented crisis. Grave global problems threaten our future. These include: rapid population growth; the spread of modern armaments, conventional, chemical and nuclear; the lethal character of modern war and terrorism; destruction of natural habitats and rapid extinction of species; gross inequalities of wealth and power around the globe; threats to democracy helped along by the internet; pollution of earth, sea and air; and perhaps most serious of all, the impending disasters of climate change.

Why have we become burdened with all these global problems? What is the reason for the crisis we now face?

There is an answer, and it can be put like this. Humanity is faced by two great problems of learning: learning about the nature of the universe and about ourselves and other living things as a part of the universe, and learning how to become civilised. The first problem

was solved, in essence, in the 17th century, with the creation of modern science. We discovered a *method* for the progressive improvement of knowledge – the progress-achieving methods of natural science.

But the second problem has not yet been solved. Solving the first problem without also solving the second puts us in a situation of great danger. All our current global problems have arisen as a result. The astonishing intellectual success of modern science and technology since the 17th century has of course led to much that is of great benefit. It has made the modern world possible. But, in vastly increasing our power to act, it has also made possible the scale and range of our current global problems. Modern science and technology have led to modern industry and agriculture, modern medicine and hygiene – and also modern armaments – all of which in turn have led – in addition to the benefits – to population growth, habitat destruction, loss of wild life and rapid extinction of species, lethal modern war, the menace of nuclear weapons ready to be unleashed at the touch of a button, pollution of earth, sea and air, degradation of democracy, and the looming disasters of climate change.

The key issue

The immense intellectual success of modern science and technology is not, however, in itself the problem. The problem, rather, is modern science and technology *in a world that has not yet learned how to become civilised, enlightened, wise*. The problem is that we have solved the first great problem of learning and so far *have failed to solve the second problem*. If we had solved the second problem, we would live in a world which has the capacity to anticipate bad consequences of new actions engaged in by millions, even billions, and take action so as to nip such bad consequences in the bud before they turn into major global problems. We would live in a world which has the capacity, if such anticipatory action fails, to tackle global problems in a cooperatively rational way, on a global basis, so that they get solved before too much damage is done, too much human suffering ensues, too many lives are unnecessarily lost. But we do not live in such a world. We have solved the first great problem but, so far, we have failed to solve the second great problem of learning – the problem of learning how to become civilised and enlightened. And that is why we face the crisis of our times.



The civilising imperative

Before the advent of modern science, lack of enlightenment or wisdom did not matter too much. We lacked the power to do too much damage to the planet or ourselves. But now that we do have modern science – now that we have successfully solved the first great problem of learning – lack of enlightenment and civilisation has become a menace. We are in a situation of unprecedented peril. Nothing like this has happened in human history before.

The conclusion to be drawn from these elementary considerations is stark. We must learn how to become civilised and enlightened. Now that we have solved the first problem, we must learn how to solve the second one. We have no choice. If we are to survive, we must learn how to make social progress towards a good, civilised, enlightened, wise world – a world that has the capacity and the will to do what needs to be done to solve global problems, and even do what needs to be done to prevent them arising in the first place.

But how are we to learn this all-important lesson? Prophets and philosophers have urged humanity to become wise for thousands of years, with no discernible success. We have perhaps a window of opportunity of three or four decades to achieve this great act of learning; if by the mid-century we have still not learned the lesson, climate change, mass migration and war may so degrade the social-political world that such learning becomes impossible.

How to move forward

What can we do? There is an answer. It has been available in the literature,⁴ largely but not entirely ignored.⁵ It can be put like this. We need to learn from our solution to the first great problem how to solve the second one. We need to learn from the manner in which natural science achieves such astonishing success in making progress in knowledge how we can achieve success in making social progress towards a good, wise, civilised world – a world, at the very least, that can deal successfully with its global problems.

I am not the first person to have this idea. It was the basic idea of the 18th century Enlightenment, especially the French Enlightenment.⁶ Unfortunately, in

putting this idea into practice, the *philosophes* of the Enlightenment made three blunders, and it is this defective version of the Enlightenment programme, inherited from the past, that is still built into the institutional/intellectual structure of academic inquiry in the 21st century.

What, then, needs to be done to put the great Enlightenment idea of learning from scientific progress how to achieve social progress towards an enlightened world properly into practice? What were the blunders of the *philosophes*, still built into academia as it exists today? And what needs to be done to put these blunders right?

It is essential to get the following three steps right in order properly to implement the great Enlightenment idea.

- (I) The progress-achieving methods of natural science must be correctly characterised.
- (II) These methods must be appropriately generalised so that they become potentially fruitfully applicable to any worthwhile, problematic human endeavour, and not just to science.
- (III) These generalised, progress-achieving methods must then be embedded into the fabric of personal and social life, into our other social endeavours besides science, and above all into the endeavour to make progress towards as good a world as possible.

The *philosophes* got all three steps wrong. First, they mistakenly held that the methods of natural science consist in assessing claims to knowledge impartially and exclusively by means of evidence. Secondly, they failed to generalise these methods to become a conception of rationality fruitfully applicable to any worthwhile, problematic human endeavour, and not just applicable to the pursuit of knowledge. And thirdly, and most disastrously, they applied rationality, derived from the progress-achieving methods of natural science, not directly to social life, to the great endeavour of making social progress towards a good, enlightened world, but instead to the task merely of improving *knowledge* about the social world.

It is this third, monumental blunder that led academic inquiry to be

developed in such a way that its primary goal became to acquire *knowledge*, not to help humanity make progress towards a civilised, enlightened world. It led the *philosophes* to set about creating the social sciences: economics, psychology, sociology and the rest. These were developed throughout the 19th century, often outside universities, by J.S. Mill, Karl Marx, Max Weber and others, and were built into universities with the creation of departments of social science in the early 20th century. The outcome is what we have today: academic inquiry devoted intellectually to the pursuit of knowledge, as far as both the natural and the social sciences are concerned.⁷

What then ought to be done to put the above three steps of the great Enlightenment idea properly into practice – and so learn from our solution to the first great problem of learning how to solve the second one? By far the biggest blunder of the Enlightenment was made at step (III). Instead of applying progress-achieving methods, generalised from those of science, directly to the institutions and endeavours of *social life* so that social progress might be made towards an enlightened world, the *philosophes* made the disastrous mistake of applying such methods to the task of creating *social science* – to the task of improving *knowledge* of social life. The proper primary intellectual task is to articulate, and improve the articulation of, our problems of living, and propose and critically assess possible and actual solutions; knowledge needs to be sought as a secondary activity, to facilitate these primary intellectual tasks. But step (III) was not the only mistake. Let us now look at all three steps in turn.

Step (I): We ordinarily recognise that science is of value in two ways: intellectually or culturally; and practically or technologically. The great Enlightenment idea of learning from scientific progress how to achieve social progress towards an enlightened world exploits a much neglected *third* way in which science is of value: it is of *methodological* value, of value because of what it has to teach us about how to make progress whatever we may be doing. But, in order to exploit this third methodological value of science to the full, it is essential that we get the progress-achieving methods of science sharply into focus.

Scientific method does *not* select theories impartially with respect to evidence, as the *philosophes* thought, and as scientists still think today. Physics only ever accepts fundamental theories that are *unified*, even though endlessly many disunified rivals can always be concocted to fit the evidence even better. (A theory is unified to the extent that what it asserts about the phenomena to which it applies is the same throughout.) These endlessly many empirically more successful, disunified rival theories are ignored – and that means physics makes a big, highly problematic assumption about the nature of the universe: it is such that all disunified theories are false. There is some kind of underlying unity in nature. The universe is physically comprehensible.⁸

This assumption exercises a profound influence over both the search for new theories, and the acceptance of existing theories. It is, however, a pure conjecture about the ultimate nature of the universe, about which we are profoundly ignorant. The specific version of the assumption, accepted by physics at any stage in its development, is almost bound to be false. Such assumptions made by physics in the past have, again and again, turned out to be false.

It is vital that this profoundly influential, profoundly problematic, implicit assumption be made explicit within physics, so that it can be critically assessed – so that alternatives can be developed and assessed – in the hope of improving the specific assumption that is made. As I have already indicated, we need a new kind of physics – and a new kind of science – that represents the metaphysical assumption of physics in the form of a hierarchy of assumptions. As we go up the hierarchy, assumptions become increasingly insubstantial, and so increasingly likely to be true, and

increasingly such that their truth is required for science, or the pursuit of knowledge, to be possible at all.

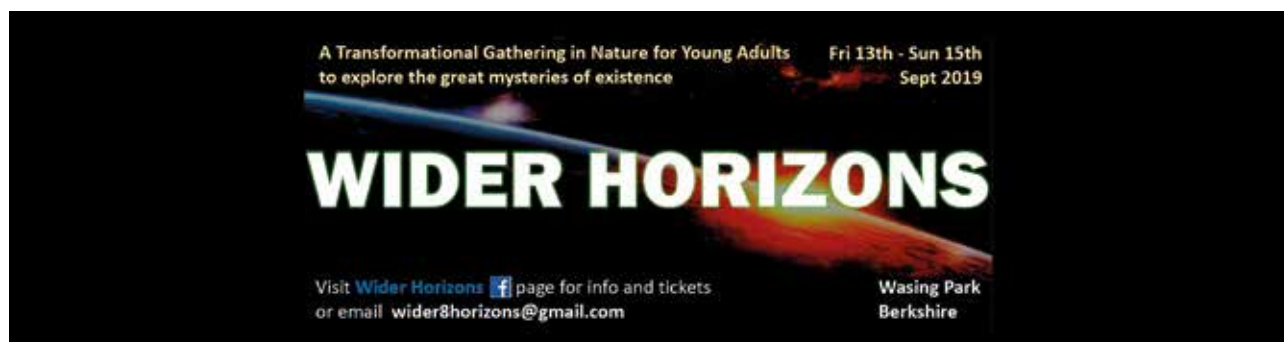
In this way we create a framework of relatively unproblematic, stable assumptions, and associated methods, at the top of the hierarchy, within which much more substantial, problematic and influential assumptions, and associated methods, low down in the hierarchy, that are almost bound to be false, can be improved in the light of which seem to be the most empirically fruitful (in being associated with empirically successful physical theories). Physics improves its assumptions and associated methods in the light of improving theoretical knowledge and understanding. As we improve our knowledge of nature, we accordingly improve the nature of science. There is something like positive feedback between improving theoretical knowledge, and improving assumptions and methods. This aim-oriented empiricist conception of scientific method has in fact been put into scientific practice since the time of Newton, but only in a furtive, constrained way, severely handicapped by the dominant assumption that evidence alone decides what theories are accepted.⁹

Step (II): The progress-achieving methods of aim-oriented empiricism need to be generalised so that they become fruitfully applicable, potentially, to all worthwhile human endeavours with problematic aims. It is not just science that has a problematic aim – the aim of discovering truth conjectured to be unified, or explanatory. In life, too, our individual, social and political aims are all too often problematic. Above all, the aim of achieving a good, civilised, enlightened world is profoundly problematic, for all sorts of more or less obvious reasons. Aim-oriented rationality (arrived at by generalising the

progress-achieving methods of science) requires us to represent problematic aims we pursue in life as a hierarchy of aims, thus providing a framework for the progressive improvement of specific, problematic aims (and associated methods) low down in the hierarchy, as we act, as we live. Aim-oriented rationality is designed to help us improve aims, ideals, actions, policies, ways of life, political programmes, philosophies of life, as we live.

Step (III): The great task then becomes to get aim-oriented rationality into all our other social endeavours with worthwhile, problematic aims, besides science, so that we may begin to make social progress towards a more enlightened, civilised world in a way somewhat comparable to progress achieved by science. We need to get aim-oriented rationality into politics, industry, agriculture, economics, finance, law, the media, international relations, and our individual lives. In so far as social inquiry has, as its basic task, to help implement this third step of the great Enlightenment idea, it needs to be developed, not as social *science*, but rather as social *methodology*, or social *philosophy*, actively seeking to help humanity develop institutions and social endeavours able to discover problems associated with aims in fact being pursued, and able in response to modify aims and methods, social actions, accordingly.

Social inquiry proposes and critically assesses, not fundamentally items of *knowledge*, but rather possible and actual *actions*, policies, political programmes, philosophies of life, from the standpoint of their capacity, if enacted, to help us realise what is of value in life. A basic task is to help humanity discover unforeseen bad consequences inherent in new



actions made possible by science and technology and, even more important, develop the social/ political *muscle* required to modify what we do so that we nip the bad consequences in the bud before they become serious – or, failing that, progressively decrease serious bad consequences until they are eliminated. A basic task, in other words, is to help humanity learn how to avoid creating new global problems, and solve those that already exist.

Promoting wisdom enquiry

As I have argued at length again and again over the decades, if academia is to put steps (I) to (III) properly into practice, thus correcting the blunders we have inherited from the Enlightenment, we need to bring about a revolution in academic inquiry, a change of paradigm for academia.¹⁰ Almost every branch and aspect of academia need to change. Natural science needs to change so that it puts aim-oriented empiricism explicitly into practice. Social science needs to change so that it becomes social *methodology* and actively seeks to help humanity transform our institutions and social endeavours so they come to put aim-oriented rationality into institutional, social practice (knowledge being sought as a secondary activity, to facilitate these primary tasks). The relationship between natural science and social inquiry needs to change so that social inquiry becomes intellectually more fundamental.

The relationship between academia as whole and the social world needs to change so that the former actively seeks to help the latter resolve those conflicts and problems of living that need to be resolved for the social world to make progress towards a better, more enlightened state of affairs. A basic task of academia needs to become public education about what our problems are, and what we need to do about them, by means of two-way discussion and debate. The basic aim of academic inquiry needs to change so that it becomes, not just to acquire knowledge, but rather to seek and promote *wisdom* – wisdom being understood to be the capacity, active endeavour and desire to realise (experience and create) what is of value in life, for oneself and others, wisdom in this sense including knowledge and technological know-how, but much else besides.

Conclusion

So, to sum up, we do need a more rigorous kind of natural science more sensitively responsive to human needs and aspirations. But, of far greater importance, we need a transformation in the whole of the academic enterprise, so that it becomes devoted, primarily, to helping us resolve conflicts and problems of living in increasingly cooperatively rational ways.

The two great problems of learning I indicated above can be fused into one problem, our most fundamental problem of all, encompassing all other problems of thought and life. It can be put like this:-

How can our human world, the world as it appears to us, the world we live in and see, touch, hear and smell, the world of living things, people, consciousness, free will, meaning and value - how can all of this exist and best flourish embedded as it is in the physical universe?

This problem, encompassing all others, ought to be put at the heart of academia and education, everyone being encouraged at some point to explore possible solutions imaginatively and critically – that is, rationally. Academia needs to be so organised that active discussion of this most fundamental of all problems influences, and is influenced by, all more specialised and particular problem-solving, in both thought and life. Half of academia, properly constituted – the intellectually most fundamental half, namely social inquiry and the humanities – would not be science, or would not primarily be devoted to the pursuit of knowledge. Their task, as I have said, would be to help people solve those conflicts and problems of living that need to be solved so that we may realise what is genuinely of value in life. Half of academia would be devoted to the discovery and realisation of what is of value, not primarily devoted to the pursuit of knowledge.

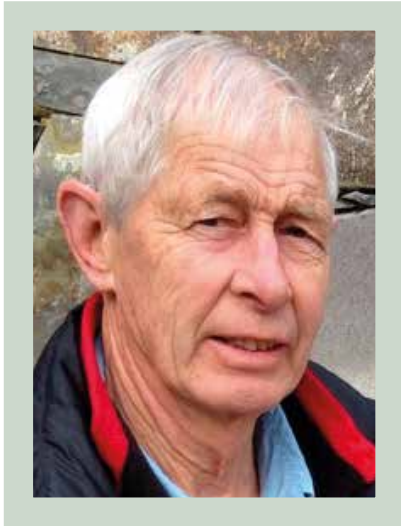
The kind of inquiry that I argue for – wisdom-inquiry – puts people at the heart of inquiry. What really matters, and what needs all our attention, is the thinking we engage in as we live, individually and together, seeking to realise what is of value as best we can. Academia is a specialised bit of fundamental personal and social thinking in life, devoted to helping us improve our life-thinking, and so our lives.¹¹

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Notes

- ¹ See Maxwell (1974; 1998; 2004; 2017a; 2017b).
- ² See Maxwell (1976; 1984; 2004; 2014; 20017c).
- ³ See note 2.
- ⁴ See note 2.
- ⁵ For critical assessment see <https://www.ucl.ac.uk/from-knowledge-to-wisdom/reviews>.
- ⁶ See Gay (1973); Israel (2014).
- ⁷ See Farganis (1993, introduction); Hayek (1979).
- ⁸ In addition, as I have already indicated, there are problematic assumptions concerning values and politics inherent in the aims of science that need to be made explicit so that they can be critically assessed and, we may hope, improved: see Maxwell (1984; 2004; 2014; 2017b).
- ⁹ This argument, first formulated in Maxwell (1974), is spelled out in detail in Maxwell (1984; 1998; 2004; 2017c); see especially Maxwell (2017a and 2017b, ch. 5).
- ¹⁰ See note 2.
- ¹¹ See especially Maxwell (1984).



Where is Gen Lama?

*Andrew Lohrey freelance research
e-mail: andrew.lohrey@gmail.com*

Here Andrew Lohrey explains his model of consciousness elaborated in his new book also reviewed in this issue.

I am sitting in the Waterside Pavilion in Hobart, Tasmania, meditating. It is September 15, 2010 at the 12 o'clock *No Worries* daily meditation program run by the Gyuto Monks of Tibet. I have been travelling and missed the first five days of the Gyuto visit and now I have come half-way through their program. Gen Lama talks for ten minutes about *Trading Grief* and then we meditate.

I have little grief to trade and find it hard to hear the English translation by Sonam, the younger Tibetan who translates for Gen Lama. I sit at the back of the room in my fog of bad hearing. I have come for the meditation, not the talk. I meditate daily and have come to experience the silence of Gen Lama who, along with the Dalai Lama, walked out of Tibet in 1959. He must be a similar age to the Dalai Lama and looks as if he could be related. He sits beneath a picture of the Dalai Lama so I have a double image of almost the same face; same large glasses, same shaved head, the same round face and skin colour. As you would expect, the energy in this peaceful room comes from Gen Lama, not the picture.

I came early and for ten minutes before the talk and watched the younger monks play with the children who were there for the period of *Culture for Kids*. I rest my hands on the rail looking down at the young monks seated cross-legged on the floor two meters below me, watching them make various forms with plasticine, and all the while being there, with and for the children. The Mawson Pavilion is a small beautiful building that faces east and sits on the edge of a dock full of sailing ships. The sun shines through the windows and the scene is relaxed, full of an easy joyful

presence. I merge into the presence so much so that I do not want to talk to anyone.

Meditation begins. I have used a mantra for years but today it does not arise. I just sit with nothing. Sometimes my eyes are open, sometimes closed. I watch Gen Lama. He is a rock. His silence is strong and gentle. After five minutes a question comes into my mind: 'where is Gen Lama'? Then a series of images arise: I see myself stand up, take up a two-handed Samurai sword, approach Gen Lama while he meditates and bring the sword down on that brown shaven head, splitting it in two. Blood, brains and bone are exposed. I look into his head and ask, 'Where is Gen Lama?'

Where do these images come from? Perhaps from Gen Lama, perhaps from a recent reading of an interview with a neurosurgeon who spoke of brains. Who knows where they come from, but I am left with the insistent question, 'where is Gen Lama'? When the meditation period is over, I leave, weeping. Perhaps I had some grief to trade after all. But these were not the tears of grief. They are the tears that come from being in the presence of, and merging with, a great soul. They are the tears of a weakening ego and perhaps that is my grief. Such tears leak away the ego's power so it begins to lose its strength and value.

Three days after the meditation session with the Gyuto Monks I return for another session. After the 12 o'clock meditation program there is question time where I ask Gen Lama: 'I can see Gen Lama's body, but where is Gen Lama'? He replies in a soft voice, in the same manner in which he replies to each and every

question put to him. Finally, the translation comes from Sonam:

‘A long time ago there was a radical monk with psychic powers who lived at the time of the fifth Dalai Lama. The fifth Dalai Lama had been very successful at developing his kingdom but had, at some point, decided he would go into a cave and meditate. When someone asked the radical monk where the Dalai Lama was, he said he was in the town looking at rich brocades. This was considered to be an insult to the Dalai Lama, so they arrested the radical monk. When the Dalai Lama finally heard of this, he said that the radical monk was correct for while he had been meditating in the cave he had been thinking of the brocades in the town’.

Gen Lama then said he hoped I was not the reincarnated radical monk for he had wanted to look at the shops in Hobart after this tour. He then said that on a deeper level he does not know who he is or where he is and if he did know this he would be enlightened. On the face of it his answer did not seem to be an answer at all, yet it was deeply satisfying. He had not directly answered my question, yet he had left me with a sense of connection and profundity. How was this possible? What meaning had passed between us that had not been framed and encapsulated by the words he used but had left me wordlessly gratified?

If Gen Lama cannot tell me where he is, how am I, a worldly westerner to know where or who *I am*? Certainly, the words Gen Lama used gave me the opportunity to answer this question in my own way, which is perhaps what he intended. When he said he was looking in shop windows, he implied that we are where our thoughts are. Yet while I know we are not our thoughts – we *have* thoughts – it seemed to me he was also saying something important about a quality of being that comes when our thoughts have focus and are strong. The question of where or who I am is a spiritual one, but it wears empirical clothing.

To be ‘somewhere’ implies that we are in a place that has a relatively precise location in space and time. This kind of empirical precision is demanded by a culture that relies on explicit details and the expectation that everything will have a visible, precise, certain and differential location. The material world that can be mapped by this

kind of language was called by the theoretical physicist David Bohm, the explicate order (Bohm 1983). This is the order of the everyday physical universe, a visible world of material objects reflected in, and reinforced by, the language of materialism, which has a bias towards the local and differential. In this explicit world there can be a relatively precise answer to where a thing is, as for example the question: ‘Where is my book? Answer: ‘It’s on the third shelf, four books from the left-hand end’.

Bohm called the other great order of the universe the implicate order. This is often considered to be a mysterious order and has been much ignored by Bohm’s fellow scientists. Within the implicate order there are no visible, extended and differential relations in time or space. In this domain there is no possibility of arriving at even a moderately precise location in time and space in response to such questions as ‘where is Gen Lama?’ This kind of question relates not to measurements but to the nonlocal, essence of Gen Lama’s being. The essence of being has no precise or explicit location.

The philosophy of being was a central concern for European philosophers in the twentieth century. On my bookshelf there is an old copy of the German philosopher, Martin Heidegger’s *Being and Time*. Throughout his long career Heidegger was preoccupied with the question of the meaning of being. For Heidegger, the central question of philosophy was ‘what does being mean?’ He felt that in general Western philosophy had forgotten about being and there was a need to restate its central importance. He set out to do this by concentrating on the being of humans, which he called *Dasein*.

I think that Heidegger may have asked the wrong question. The question he could have asked was not ‘what does being mean?’ but the prior question, ‘what does meaning mean’ or, more precisely, ‘what is the meaning of meaning?’ Had he asked this question he would have realized that the meaning of meaning provides us with the structure and function of being.

To study meaning is to study the intelligibility of being and that also means studying the intelligibility of consciousness. David Bohm once said that meaning was the essential nature of consciousness (Hiley & Peat 1991: 436). I agree. Wherever there is meaning there

is consciousness, and wherever consciousness there is meaning. So close is the link between meaning, consciousness and being we can say they are not three separate domains of activity but one. In other words, meaning represents the contents of being as well as consciousness. Consciousness and meaning are the two sides of the same coin of being and as a consequence they enable us to ask questions about meaning and get answers about states of being as well as mind.

The terms ‘meaning’, ‘being’, and ‘consciousness’ have different histories yet each nevertheless represents the same vital metaphysical landscape. We are thus able to make meaning consciously, subconsciously, unconsciously, pre-consciously, self-reflectively, intuitively and clairvoyantly. Each of these psychological terms represents a set of mental processes in which meanings are exchanged and/or transformed. As a consequence, to understand the nature of being and the human mind we must first come to understand the innate structures and functions of meaning.

I argue in *The Evolution of Consciousness: A New Science* that meaning is much more than a by-product of symbols or the interaction of signs. The usual mistake made in the traditional teaching of linguistics, semiotics or semantics is to view meaning as having a secondary role to language by assuming it is a side effect of the more important and primary interaction of signs, language or symbols. This key reversal simply creates confusion. It is not language or symbols that give life to meaning but the reverse: meaning gives life, vitality, agency and intelligibility to the interaction of signs and language. Language without meaning constitutes a meaning-less set of marks on a page. A dead language represents meaningless smudges and spots that cannot be spoken or used because meanings have been lost. In order to appreciate the essentialism of meaning to being and consciousness we need to comprehend something about meaning’s structures and functions.

Meaning has two poles of attraction that are entirely integrated. These are: i) the pole of explicit meaning; and ii) the pole of implicit meaning. Explicit meaning represents the meaning of Bohm’s explicate order and comes in the forms of distinctions, differences, contrasts

and definite marks. In contrast, implicit meaning is the meaning of Bohm's implicate order and such meaning creates links, connections, unities and wholes and is the content of all contexts in every area of endeavour. Both these poles of meaning have the further attributes of locality and nonlocality. These terms are often used in physics to refer to the difference between a local action and an action at a distance.

The pole of explicit meaning has locality and so is concerned with local action, such as the distinctions within sensations as well as the conscious orientation of 'being here'. In contrast, the pole of implicit meaning (Bohm's implicate order) has a nonlocal character, that is, it has a kind of action at a distance without direct physical connections. Such is the nature of intuition and extra-sensory perception. These two poles are woven together into a contradictory yet holistic, infinite and yet local structure. This universal yet local structure can be described as the singular, nonlocal context of cosmic consciousness that contains within it a myriad of local minds, all of which display a variety of explicit distinctions and differences.

These two poles of attraction produce the human mind with its conscious differential and local foreground that arises from the nonlocal background context of implicit meaning. When we listen to music, for example, having a conscious focus on distinct notes that arise from, and contrast with the implicit background context that carries the score. This innate relationship between foreground differences and the background context represents a metaphysical gestalt structure that is generic to the human mind. This innate gestalt structure is unaffected by culture or biology.

The role of meaning in relation to the human mind is that of a given resource which we use to create further meaning. It is an environmental resource like the ocean yet contains a creative organising capacity. The intelligible nature of meaning is, therefore, unique in the universe and it has no physical equivalent. The two implicit and explicit poles of meaning can be called primary and secondary, generic and relative, given and constructed, or resource and results.

As the ultimate *sine qua non*, implicit, nonlocal meaning represents the ever-present vital background

contextual resource for every local explicit act, form, distinction or object. In addition, meaning has the agency of intelligence so that it orders or disorders, organises or disorganises the actions and movements of the universe. At its most fundamental, nonlocal level of cosmic consciousness implicit meaning has the primary agency of self-causality. This primary state of universal consciousness stands as the meaning of Meaning. This state is outside the differences of time and thus has an eternal presence and cosmic wholeness and is immanent within every organism, and because of its agency has transcendence over everything. The secondary level of differential meaning made by local individual minds can be described as the meaning of everything other than the meaning of Meaning.

How are we to understand the seeming contradiction between the locally explicit and the nonlocal implicit in relation to being? What exists in a conscious state is explicit, yet being is more than distinct, explicit meanings existing within a conscious mind. Being is also that which exists implicitly and that which exists implicitly functions nonlocally, that is, as an aspect of the Being of all beings.

A useful explanatory tool to describe the seeming contradiction between the locally explicit and the nonlocal implicit is the hologram. A hologram is a three-dimensional image that can be imprinted onto a photographic plate. When a laser beam illuminates the plate, it reveals a three-dimensional image that is almost identical to the original object. When a small region of the plate is cut off and is illuminated again by a laser beam, what we see is not a piece of the image but the whole image in a diluted form. This is extraordinary for it means that the whole of the three-dimensional image has been recorded in every part of the plate. The complex structure of a hologram is created by the exchange relationship of part-to-whole and whole-to-part, and it is these holistic exchange relationships that give the hologram its undivided interconnectedness or wholeness. In addition, within the hologram is an asymmetrical order in that the parts always arise from the whole and not the other way around.

The trinity of being

From the standpoint of meaning, the human being is not a single ontological entity with a separate, finite being. This local model of being is suggested by Heidegger's term 'Dasein'. Rather, the human being is composed of a trinity of relationships made up of the three terms: 'I', plus the collective 'us' and the universal 'That'. The universal 'That' represents the universal, singular, nonlocal consciousness while the individual's mind comprise the local features of 'I' and 'us' combined.

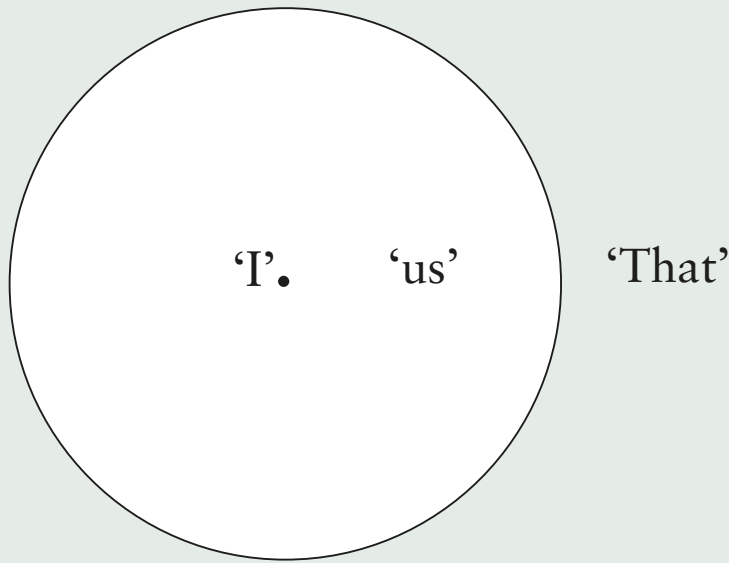
It follows from these trinity conditions that the individual's local mind represents the sum of habitual exchanges that interconnect and swirl around 'I' and involve the collective 'us'. Within the local mind of the individual there are myriad of social and cultural features but there are no exclusively private features. Traditionally the individual's mind has been seen as a private and separate island of consciousness. In terms of the contradictory conditions of meaning, this conclusion is false, for 'I' and 'us' (the mind) are only local distinctions within the contextual whole of one universal consciousness.

Within the trinity of being, 'I' and 'us' are linked by exchange relationships. In contrast, every local mind (comprising 'I' and 'us') has a holographic relationship to the whole of cosmic consciousness: 'That'. This holographic relationship represents those exchanges involving the symmetry potentials of part-to-whole and whole-to-part. In other words, universal consciousness inheres in every individual mind, while every individual mind represents the local part of the whole fabric of universal consciousness.

The trinity of being can be shown roughly in the diagram below:

The dot in the centre of the circle represents the sight within seeing, that is, the sight within insight and the 'I' within eyesight. The circle outside the dot represents the exchanges that take place within the collective 'us'. The extended area outside the circle ('That') represents the infinity of cosmic consciousness. As the white background of this design continues through the circle of 'us' and 'I', so too does the meaning of cosmic consciousness underpin these two features of being.

The trinity of being



This diagram also suggests that the circle of 'us' extends the 'I' so as to include the ego, language, culture, communications, predispositions, opinions, dogmas and preferences, all of which are largely the results of the social and cultural interactions that we experience. In addition, the awareness potentials inherent in 'I' (the sight within seeing) always operate within the context of a collective 'us' because individuals can never be entities separate from the cultural meanings propagated by 'us' and these in turn are always a part of the trinity of our being.

The relationship between 'I' and 'us' is internal to the individual's mind and is supported by circular reinforcements that come from exchanges of meaning via different forms of social interactions. Also, the boundary of 'us' encloses not only our tribe, class, caste, ethnicity or nation, which are only artificial divisions, but also the cultural meanings of 'us' include all cultural differences as well as the cultural exchanges of all sentient beings. Like drops of water, individual minds are always part of a larger stream of 'us' that flows into the ocean of universal consciousness. As drops of water are not separate from the ocean neither are the minds of individuals separate from the social 'us' that spawns them or the hidden and infinite resources of 'That'.

The two-way relationship between the intelligence of an individual mind (involving 'I' and 'us') and the intelligence of One

Consciousness ('That') is not linear but complementary. This means that the individual's mind ('I' and 'us') is a part of the whole of cosmic consciousness, while the whole of cosmic consciousness inheres within every mind and provides the foundation context (the background) for the various explicit functions of the individual's mind. The individual mind is therefore, never a separate and private entity having its own self-autonomy, but rather represents a secondary and what scientists could call an 'entangled' feature within cosmic consciousness.

The relationship between 'I' and 'That' may be described as an insight path that manifests through exchanges of meaning occurring in intuitions, insights, revelations, epiphanies, synchronicities, prayers and visions. These holographic exchange patterns are overwhelmingly symmetrical in nature (part-to-whole and whole-to-part) and that means they are entangled to the degree that it is impossible to make clear a distinction or demarcation between 'I' or 'That'. Yet the exchanges of 'I' and 'That' currently tend to be inhibited by a range of socially constructed defence mechanisms creating the illusion that we have a separate, private and autonomous mind.

The hologram model provides us with a general understanding of what appears at first sight to be a multiplicity of separate and autonomous individual minds, but which are wholly inter-connected

and integrated into the overall universal implicit context of cosmic consciousness. Like the visual patterns that make up the fabric of the holographic image, the unique patterns that individuals exhibit create the interconnected fabric of society and the culture of 'us', while these sets of distinctions in turn represent the holographic features of cosmic consciousness.

Over the years the question I asked of Gen Lama has persisted. In terms of the structure and function of meaning that question now has an answer. The being of Gen Lama is both explicitly local – he meditates before me – and yet implicitly nonlocal – he exists as an implicit aspect of universal consciousness. I also exist as a local, explicit and conscious mind as well as an implicit, nonlocal essence that is linked to Gen Lama.

The contradictions of this kind of existence come from the nature of meaning and from the trinity of being. Meaning's integrated nature has produced a panentheistic vision of a Being that is both immanent in everything and transcendent of everything. In this holistic sense the Divine is both inner and outer and reflects the kind of Stoicism that Marcus Aurelius expressed in his *Meditations*: 'all things are interwoven with one another; a sacred bond unites them . . . The world-order is a unity made up of multiplicity' (Book 7, 9).

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The Gendered Language of Science

Evelyn Fox Keller in conversation with Bill Moyers

This episode of World of Ideas first broadcast in May 1990 featured Evelyn Fox Keller on the rhetoric of science. When she first set out to be a scientist in the 1950s, Fox wondered why the language of science itself reflected patriarchal, masculine metaphors and values, and what it meant for the discipline. Here, she talked with Bill Moyers about her work on gender and the history of science. The points she makes have lost none of their force and relevance.

TRANSCRIPT

BILL MOYERS: [voice - over] When Evelyn Fox Keller set out in the 1950s to be a scientist, she discovered it was a man's world. Not only because most scientists were men, but because the language of science itself reflected masculine metaphors and values. Why is this so, she wondered? Trained since then as a theoretical physicist, she has taught mathematics and done research in mathematical biology, but it is her work on the history of science, her book, *Reflections on Gender and Science*, and her biography of the geneticist Barbara McClintock [*A Feeling for the Organism*] that brought me to the University of California at Berkeley where Dr. Keller teaches in the department of rhetoric.

[interviewing] What does rhetoric have to do with science, I thought, when I first heard about you?

EVELYN FOX KELLER: Right. That is a good question. Language, I think, is the mediator of human values and human expectations into our descriptions of nature. And if we want to understand how science reflects - the ways in which science is reflecting back to us particular expectations, particular values, we have to understand, we have to look at the language of science and see how that works, how the traffic between ordinary and technical language works as a carrier of, if you will, of ideology into science.

BILL MOYERS: And one of your chief contributions to this has been that gender plays a significant role in the language that scientists use to describe their work.

EVELYN FOX KELLER: It has played a very, very powerful role.

BILL MOYERS: And by gender you mean - you don't mean sex, that - the given of nature, our biological difference, do you?

EVELYN FOX KELLER: No, I mean ideas of masculinity, ideas of femininity, that the language of sex and the language of gender have been extremely prominent in scientific discourse since the scientific revolution.

BILL MOYERS: And the dominant image has been?

EVELYN FOX KELLER: Well, Henry Oldenburg said it very clearly. The purpose of the Royal Society was to establish a truly masculine philosophy. What did they mean by a truly masculine philosophy? Francis Bacon said, "Let us establish a chaste and lawful marriage between mind and nature." The purpose of this marriage was to bind nature—bring nature and all her children to your service, bind her and make her your slave. That was the purpose of the - [Bill Moyers interrupts]

BILL MOYERS:

Mind/husband - nature/wife. And the purpose of science was to give the mind, the husband, mastery over nature?

EVELYN FOX KELLER:

That's right. That's right. That the central metaphor for the scientific revolution was a marriage between the mind and nature that was modeled on a particular kind of marriage, a patriarchal marriage, the purpose of which was the domination of nature, the bride nature.

BILL MOYERS:

And the Royal Society of London was founded in 1662, and didn't admit a woman until 1945.

EVELYN FOX

KELLER: [laughing] Yes.

BILL MOYERS:

That's letting the language determine your policy for a long time.

EVELYN FOX KELLER:

But science had a particular commitment to the notion that there was something special about what they were doing, a special kind of thinking, a special kind of philosophy, a special kind of activity

BILL MOYERS:

What was it?

EVELYN FOX KELLER:

- that was, in the most general sense, was thinking like a man. It was thinking—it was the idea, it was committed to an ideal of objectivity that was from the beginning equated in a very curious way, the equation between objectivity and masculinity is a very curious equation. And in fact, it was that equation that motivated my entire inquiry. I wanted to understand what does that mean, to say "thinking objectively is thinking like a man"? What could it mean? Where did such an idea come from? And more important, what consequences has it had for science?

BILL MOYERS:

There were so many examples of these first scientists, 300 years ago, founding modern science, who used this masculine language to assign masculine virtues to science. Your book is full of them. Which is your favourite?

EVELYN FOX KELLER:

The best quote I can think of is Joseph Lanville. He wrote: "That Jove himself cannot be wise and in love may be understood in a larger sense than antiquity meant it. Where the will or passion hath a casting voice, the case of truth is desperate. The woman in us still prosecutes a deceit like that begun in the garden, and our understandings are wedded to an Eve as fatal as the mother of our miseries," He concludes: "Truth has no chance when the affections wear the breeches and the female rules."

BILL MOYERS:

He was saying that we have to exclude feeling, empathy, intuition from the search for this—how the world works?

EVELYN FOX KELLER:

That's right. But he's doing it by attaching them to the female, to the female voice. He's saying both. Excluding female—we're excluding affection, feeling, emotion, because it's female, and we're excluding females because they bring affection, they carry with them affection. By that equation, by that equation between emotion and female, he is excluding both in one move.

BILL MOYERS:

Whatever their motives, the consequences have been significant for science, and for all of us, right?

EVELYN FOX KELLER:

Right. Once you have shown how important, how prevalent these images of masculinity and femininity and domination were, the question remains, so what? Right? That's really the question. And it is very clear - let me take the arguments that would be made. One person might say: "Yes, but that's just in the 17th century. We've left that long since behind." Well, the response to that is that we haven't left it behind, it is still with us, and just in case - just as an example, I brought - I looked in my office this morning -

BILL MOYERS:

A scientist who does her research.

EVELYN FOX KELLER:

- right. I just pulled out, as an example, a quote from C.P. Snow from *The Masters*, in 1951. He's describing the young scientist, Luke, who has just had a breakthrough. "It's wonderful," he burst out, "when you've got a problem that is really coming out. It's like making love. Suddenly your unconscious takes control, and nothing can stop you. You know that you're making old Mother Nature sit up and beg, and you say to her, 'I've got you, you old bitch.' You've got her just where you want her."

BILL MOYERS:

Hmm. That's 300 years after the birth of -

EVELYN FOX KELLER:

That's 300, 300 years after.

BILL MOYERS:

- so what happened was that this, as a consequence of that era, there was created this ideology, that mythology, that objectivity, reason and the mind are male attributes, and subjectivity, feeling and nature are female attributes. But what did that mean to the history of science?

EVELYN FOX KELLER:

That's a question, I think, that really is the kind of question that faces all of the history and philosophy of science today, that we have learned — the hard way, I think — we have learned that the notion that science, whatever the motivations of the individual scientist, that science gives us a mirror, a reflection of nature, so that the laws of nature are in nature. We've learned that that picture of science just doesn't work, that that's a metaphor that has many functions, most of them political and social, that it really is not a very good description of the - of actually what happens, that actually, what happens is that the descriptions of nature, the theories of nature, are very complexly influenced by all kinds of social, cultural, psychological presuppositions.

BILL MOYERS:

My friend at the University of Texas, a physicist, Steven Weinberg, talks about the universe as being one of overwhelming hostility. Now, do you feel the universe is hostile?

EVELYN FOX KELLER:

Well, how can the universe be hostile? I also quote Steven Weinberg in this same lecture. That's another example. You know — Steven Weinberg is somebody I quoted in my book on gender and science, also, here's a wonderful quote. He says: "The laws of nature are cold and indifferent. We didn't want it to come out that way; it just came out that way." Well, I think that there is a sense in which we did want it to come out that way, that there is a — that the language of hostility, of coldness, of indifference is a human language, and that that human language is written into our descriptions of nature, into what Weinberg calls the laws of nature.

BILL MOYERS:

So this is what -

EVELYN FOX KELLER:

It's written into the very notion of laws of nature.

BILL MOYERS:

in what sense?

EVELYN FOX KELLER:

A law of nature is a very curious construct. It is—whose law is the law of nature? Where does the idea of a law of nature come from? And what is the function of a law of nature? The law of nature, the concept of a law of nature comes originally from the civic realm. Well, first it comes from the realm of God; the laws of nature were originally God's laws. Now, in contemporary science, we don't believe in God's laws, but still, the laws are—have an existence in our imagination, somehow above the phenomena, but the phenomena must conform to the laws of nature.

And this is very important when you think about - actually how physicists work, and how we develop our science. Because what in fact we do is, we - you know, Francis Bacon gave us all kinds of memorable expressions about how we have to "vex" nature, that nature only under the art of vexation will reveal her true nature. Well, we do vex nature, we vex nature quite a bit. We twist and conform—we make—it is no easy task to make nature conform to the laws of nature.

Let me tell you—as a scientist I can tell you that it is very hard work to get nature to conform to the laws of nature. Nature has to—the natural phenomena have to be structured and constrained and twisted and vexed to an astonishing degree, and then they will obey the laws of nature. So what is this telling us about the laws - what are laws of nature doing? What is their relation to other kinds of phenomena?

BILL MOYERS:

So when Steven Weinberg says that the laws of nature are as impersonal and free of human value as the rules of arithmetic, you're not objecting to the formula as much as you are to the very language, the very use of the word law to describe the operations of nature. Is that what I'm hearing?

EVELYN FOX KELLER:

I'm objecting to both. I'm objecting to the language of laws and also objecting to the notion that they are as free of human value as the rules of arithmetic. I think it's not true. I think there is nothing, it is a fantasy that any human product could be free of human values. And science is a human product. It's a wonderful, glorious human product.

BILL MOYERS:

But what about nature? Nature is not a human product. I mean, the natural world is not a human product.

EVELYN FOX KELLER:

Yeah, but science doesn't give us nature. Science gives us a description of nature. Science gives us scientific theories of nature.

BILL MOYERS:

And in the description of nature, we assign to that description our own subjective experience.

EVELYN FOX KELLER:

There is no way of avoiding that. There is no way of—there is no magic lens that will enable us to look at—to see nature unclouded, with—uncolored by any values, hopes, fears, anxieties, desires, goals that we bring to it. There is no such magic lens. We interact with the world, we interact with the world in purposive ways, and it is very easy to see how values, whether they are values that come from an ideology of gender or ideology of class or ideology of - or commitment to militarism, it is relatively easy to see how the values will help guide the kind of question you want to ask.

BILL MOYERS:

But you're not arguing, are you, that if there were more women in science, we'd be studying acid rain instead of Star Wars? That's -

EVELYN FOX KELLER:

No, no.

BILL MOYERS:

- more complicated.

EVELYN FOX KELLER:

I wish that were true. I wish all we had to do was to bring more women in science, because we're bringing more women into science now, and then it would change, you know. But no, it's much more complicated, because these social, ideological patterns get imprinted onto the very structure of science. It's a - you know, it has—there's a momentum to the development of science. You don't just come in and change it with—you come into science with a different language, first of all, you don't come into science. I mean, that's the first thing.

BILL MOYERS:

You may come in, but leave fairly soon.

EVELYN FOX KELLER:

You will leave very soon. So the first point is that in order to enter into this world, you have to become resocialised. So whether you are, you know, you may have had a different language or a different set of expectations or a different set of interests because you were socialised as a woman or because you were socialised as, you know, working - class, a black, or whether you were socialised as - you grew up in Japan or China. It doesn't matter. When you enter into the world of science, if you want to be a member of this world, you have to learn its language. You have to learn the language of that world. So that's the first point.

BILL MOYERS:

Right.

EVELYN FOX KELLER:

And the second point is that the language and the goals and the endeavour have a dynamic of their own. If it is the case, as I believe, if it is the case that the language of science shapes the actual content of science, what it - how we employ this wonderful, this wonderful human endeavour, this wonderful human talent, then I think that is far more important in the question of women and science. The question of women and science is important; I don't want to say it's not important.

BILL MOYERS:
Right.

EVELYN FOX KELLER:
But there are more—given the tremendous role that science plays in the world we live in, the idea that science could be redirected, that there could be changes in the way in which science is done and the way in which it moves, the direction in which it moves, that seems to me of even greater importance. That's my principal argument. And my principal case, my strongest case for that argument, is the story of Barbara McClintock. I titled my biography of McClintock *A Feeling for the Organism*—it wasn't for my agenda that I chose that title. The title was hers. It's her deepest belief that you cannot do good research without a feeling for the organism. A feeling for the organism was her refrain.

BILL MOYERS:
But what do you mean, Dr.

EVELYN FOX KELLER:
“a feeling for the organism?”

EVELYN FOX KELLER:
I mean, the ability to identify with the subject of study, to feel kinship with the subject that you are studying, instead of feeling engaged in a battle, in a struggle, in a state of opposition.

BILL MOYERS:
And you really feel that's primarily a female mode of approaching science?

EVELYN FOX KELLER:
No. I believe that it's been called a female mode of approaching science. I believe it is a human virtue, a human talent. We're talking about empathy, the capacity for empathy. I don't think that women have a corner on the market of empathy. I think that all of us are capable of empathy, although I do think that it's not a talent that is very well developed in many men, because of the ways in which they're raised. But it is precisely because it has been identified as a feminine virtue, as a feminine talent, that it has been excluded from science.

BILL MOYERS:
Can you give me some specific examples? I mean, I can think of some very obvious ones. I think of the first atomic bomb was called “Fat Boy,” and it was delivered from the womb of a bomber named “Enola Gay,” a female delivering a weapon of destruction. But that's probably too extreme an example for you.

EVELYN FOX KELLER:
Well, isn't it extraordinary—that metaphor. I mean, what do you make of it? That was a metaphor that really, really plagued me.

BILL MOYERS:
I make of it that men were at war, and men were the scientists who invented the atomic bomb, and they gave it the name they would give something if they were playing in a schoolyard.

EVELYN FOX KELLER:
Yes, except that the idea of the metaphor of bomb as baby is to me more than something a kid would do in a schoolyard. I mean, that carries, for me, far more import.

BILL MOYERS:
And as you pointed out, the bombs with the thrust are called boy babies, and the bombs that were duds were called girl babies.

EVELYN FOX KELLER:
That's right, that's right. That's right.

BILL MOYERS:
It isn't just the 20th century, though, is it, Dr.

EVELYN FOX KELLER:?
I mean, I think of Mary Shelley writing *Frankenstein*, carrying on that—depicting that story of the mad scientist down in his basement pursuing the secret of life, discovering the secret of life.

EVELYN FOX KELLER:
Right.

BILL MOYERS:
And then turning the secret of life into something monstrous.

EVELYN FOX KELLER:
The difference, of course, is that that was a story.

BILL MOYERS:
It was a story, but stories get at meanings. And here's a—I've often wondered if this was a woman's view of science, Mary Shelley writing *Frankenstein* as a parable about how a woman, or perhaps many women, saw science, pursuing perfection and finding instead the monster that destroys the creator.

EVELYN FOX KELLER:
Except that that's a story, a fantasy that has been embraced by many men. I mean, that story, the popularity of that story, Mary Shelley wrote it, but who reads it? Who reads the story of *Frankenstein*? That myth, that idea, that men, in seeking the secret of life, in seeking the power to create life without women, that's really what that story is about. It's the - that, along with many other stories. It's about the co-optation of the procreative function by men. It's a story of dispensing with female procreativity. That's what that story is about. And what does it result in? It results in a monster—not the secret of life, but a monster who becomes the secret of death. It becomes an agent of destruction. That theme is with us everywhere, that theme that - and that was my interest in the metaphor of bombs as babies, that the idea that when men succeed in discovering the secret of life, in taking it in their hands, they will produce babies that will be agents of destruction. They will be the instruments of death. That is a cultural myth. That's a cultural motif, and not just our own. It's a motif that you find in many, many cultures. That's a very archetypal story. It isn't only Mary Shelley's story. But stories are very powerful, and they speak very deeply to our deepest anxieties, our deepest desires. Still, there's a difference between a story and the actual construction, technological structure. And I think these stories have had a lot to do - they tell us a lot about the motivation that has led us to the moment in time when we can all but create life out of a test tube. We are engaged in this activity, in this interaction with nature, if you will, with natural phenomena. We are seeking knowledge. For what? To what end? Knowledge - we are always we are very purposive creatures. Some people will say - I think McClintock would say, many other people would say we are just in it for the understanding, for the sheer understanding. And that's very beautiful, and it's very

nice, and I can really resonate with that. But understanding always has consequences. For example, take the human genome project. The purpose of the human genome project is to give us a complete readout of the human genome so that—it's not just for knowledge, why you know, why do we want a complete readout of the human genome? Why not a readout of all the molecules that make up our solar system? Why do we want the human genome? Well, we - it has, it's not just for understanding. It has a purpose. We think it will give us better control over the genetic constitution of the human race. People say, "Well, it will help us cure disease." I think - I don't believe it. I mean, not many people do believe it.

BILL MOYERS:
Right.

EVELYN FOX KELLER:
The real purpose of the human genome project is to gain—is to fulfil a vision of control over the future course of evolution. I mean, that's putting it very baldly, but that really was the vision that inspired the early development of classical genetics and molecular genetics. The idea was to get the future course of human evolution in one's hand, and that's a very extraordinary vision, that it speaks to a kind of control, a degree of control that one would not think of having in relation to a subject that one had a more erotic, more interactive, more reciprocal feeling—engagement with. That is control in the sense of - in the Baconian sense of domination, that nature is there to be steered, to be directed, to be - now who are we to steer and direct this - the future course of evolution?

BILL MOYERS:
It's very biblical, you know, men interpreting their mission from God to dominate the Earth.

EVELYN FOX KELLER:
That's right, it is biblical. It is exactly biblical. And scientists have inherited that mantle, that we don't need God anymore because we are doing it.

BILL MOYERS:
But as a biologist, are you not curious about what will be learned from the human genome project?

EVELYN FOX KELLER:
Of course I'm curious. I think that—you know, I have no doubt that it'll be tremendously interesting and tremendously useful. But it will not—first, I do not think it will fulfil the fantasy. I do not think you can control the course of evolution by getting your hands on the genes, because I don't think the genes are where everything is at.

BILL MOYERS:
The public at large - there are people in the general public who think of this project as giving us the power to create the perfect human being, you know, that ultimately, down the road we'll be able to connect way back in the genetic chain the potential for a disorder in that child that's emerging so that we'll avoid the crippling disease.

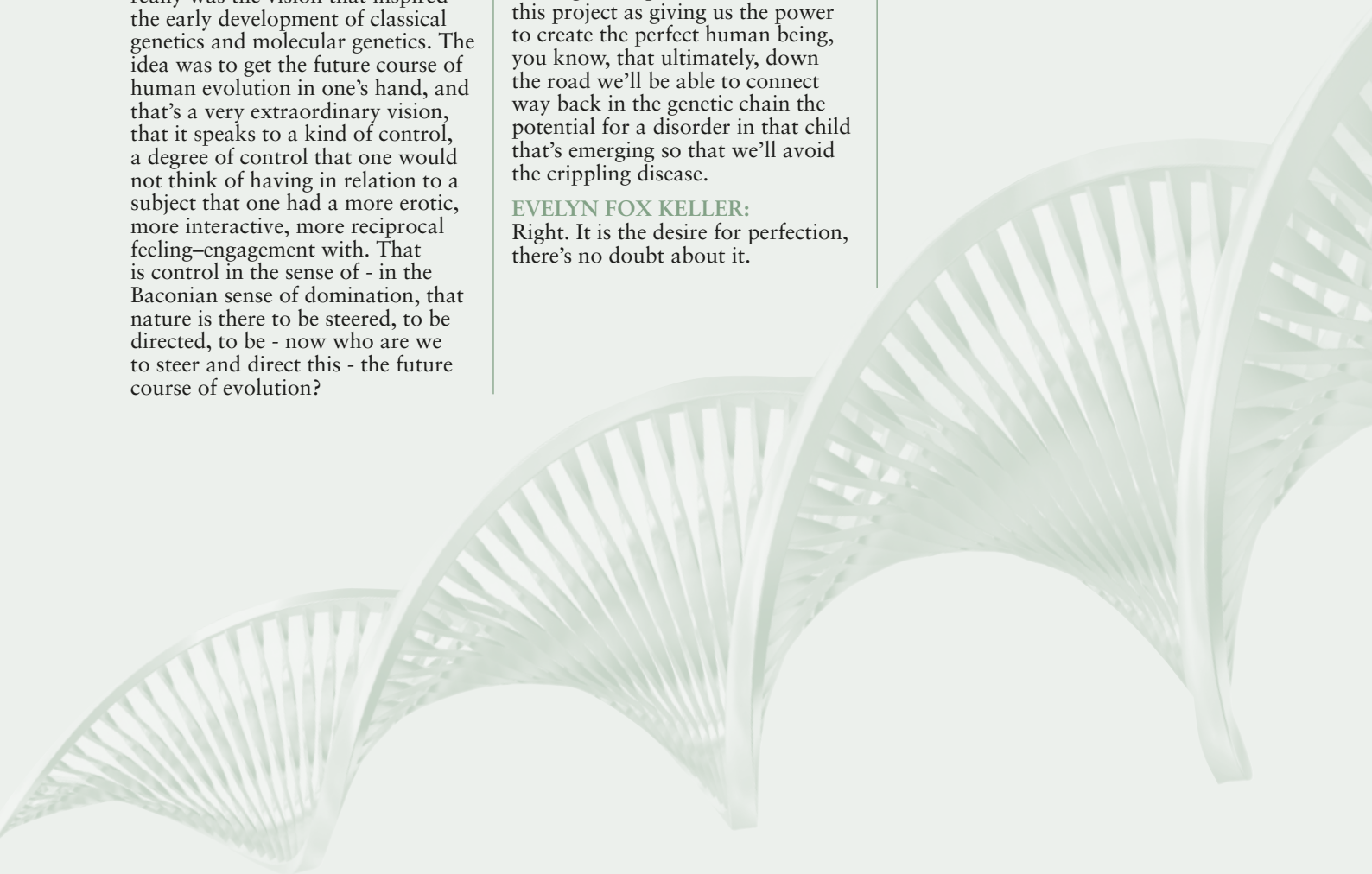
EVELYN FOX KELLER:
Right. It is the desire for perfection, there's no doubt about it.

BILL MOYERS:
But that's driven us for how many centuries now?

EVELYN FOX KELLER:
Oh, many. And very productively, you might say. But also dangerously. I mean, that—in the 20th century, we can't speak—any longer speak of the glories of science as an unmixed blessing. And it's cost us and it endangers us, and it also empowers us. And the question is whether we can harness this resource or we can redeploy this wonderful creative resource in ways that would be more productive for the future survival and well - being of humankind.

BILL MOYERS: [voice - over]
From her home in Berkeley, California, this has been a conversation with Evelyn Fox Keller, I'm Bill Moyers.

This transcript was entered on March 27, 2015.





The Metabolic Theory of Cancer and its use of a Ketogenic Diet

Travis Christofferson

American Travis Christofferson's Tripping Over the Truth describes the development and growing adoption of the Metabolic Theory of Cancer. Here he outlines how it offers a more accurate understanding of how cancer develops and why a ketogenic diet can be effective

First, one needs to understand what the ketogenic diet is and why and how it works. Your body, like a hybrid car, can burn two types of fuel; it has been designed that way by millions of years of evolution.

The fuel we all know about is sugar/glucose, which comes from carbohydrates. The other, much less-familiar type is called ketones or ketone bodies – small, energy-dense molecules that the body makes in the liver from fat. It is a sort of back-up system that automatically kicks in when carbohydrate/glucose supplies run low. So, a ketogenic diet involves eating almost no carbohydrates and replacing them with fat.

What has this got to do with cancer? Healthy cells can make energy in small 'power plants' called mitochondria using either glucose or ketones. Some athletes claim that ketones are a better source of fuel for long distances. Crucially, the mitochondria in cancer cells do not work very well, if at all, so the cells have to switch to a cruder and less efficient system called glycolysis, which needs much larger glucose supplies than the mitochondrial route.

Remove cancer's preferred source of fuel

Going ketogenic can weaken cancer cells because, not only are they getting less glucose in the blood, but their faulty mitochondria cannot use ketones. So, the logic behind the ketogenic diet as a cancer therapy is seductively intuitive: remove the cancer cells' preferred source of fuel and replace it with a fuel it has difficulty burning. Simple.

Given this very plausible scenario, it is a big mistake to categorically claim the ketogenic diet is a 'cancer treatment myth', as some have done, especially if your life is at stake. Critics have challenged the scenario by saying that changing diet is flawed from the very start because cancer is caused by mutations to DNA – and therefore any dietary intervention cannot affect cancerous cells. The dogmatic assumption that cancer is exclusively a genetic disease, however, is a position that is becoming harder and harder to defend.¹

A massive US Government effort to understand the genetic underpinning of cancer, called The Cancer Genome Atlas (TCGA) project, that kicked off in 2006 and

concluded in January, 2015, has left many cancer researchers scratching their heads. Its findings have shaken the very foundation of the standard theory of cancer.

TCGA shows cancer not exclusively caused by DNA mutations

The model we all know about says that cancer is the result of a relatively small number of 'driving' mutations turning a healthy cell cancerous and causing it to grow uncontrollably. This would allow them to be targeted with drugs. However, this is not what the Atlas shows; the most defining feature of the cancer cell genome as revealed by TCGA is that it is completely chaotic.

The TCGA sequenced the entire genomes from 10,000 malignant tissue samples and reportedly discovered 10,000,000 cancer-related mutations but there was no clear pattern. Some cancers had 20 or more mutations; others might have just one mutation or even none at all. The conclusion: cancer is not exclusively caused by mutations to DNA. It cannot be. Something else must be causing and driving it.

TCGA was intended to be our last battle with cancer; we would finally know it in its entirety but, rather, it left us with a murky, muddled mess. A 2015 *Nature* article titled, *End of cancer-genome project prompts rethink*, highlighted the confusion:

'Also a problem was the complexity of the data. Although a few 'drivers' (genes that, when mutated, cause or 'drive' cancer) stood out as likely contributors to the development of cancer, most of the mutations formed a bewildering hodgepodge of genetic oddities, with little commonality between tumors.'²

This is what James Watson, the Nobel Prize-winning, co-discover of the structure of DNA, said of TCGA:

'We can carry on and sequence every piece of DNA that ever existed, but I don't think we will find any Achilles' heels. We've had about 10 years. It's not the story I wanted to hear. I would have hoped for a lot more success.'³

If mutations to DNA are not the entire picture, then what is the ultimate cause of cancer?

The role of epigenetics

What we do know is that something called epigenetics – the turning on and off of genes – is involved in transforming a normal cell into a cancerous one. Dr Jean Pierre Issa, of MD Anderson Cancer Center, a tremendously respected cancer researcher, said in an interview for NOVA, a division of Public Broadcasting:

'Up until recently the idea was that cancer is a disease of genetic changes. The genes themselves, their structures, become abnormal.

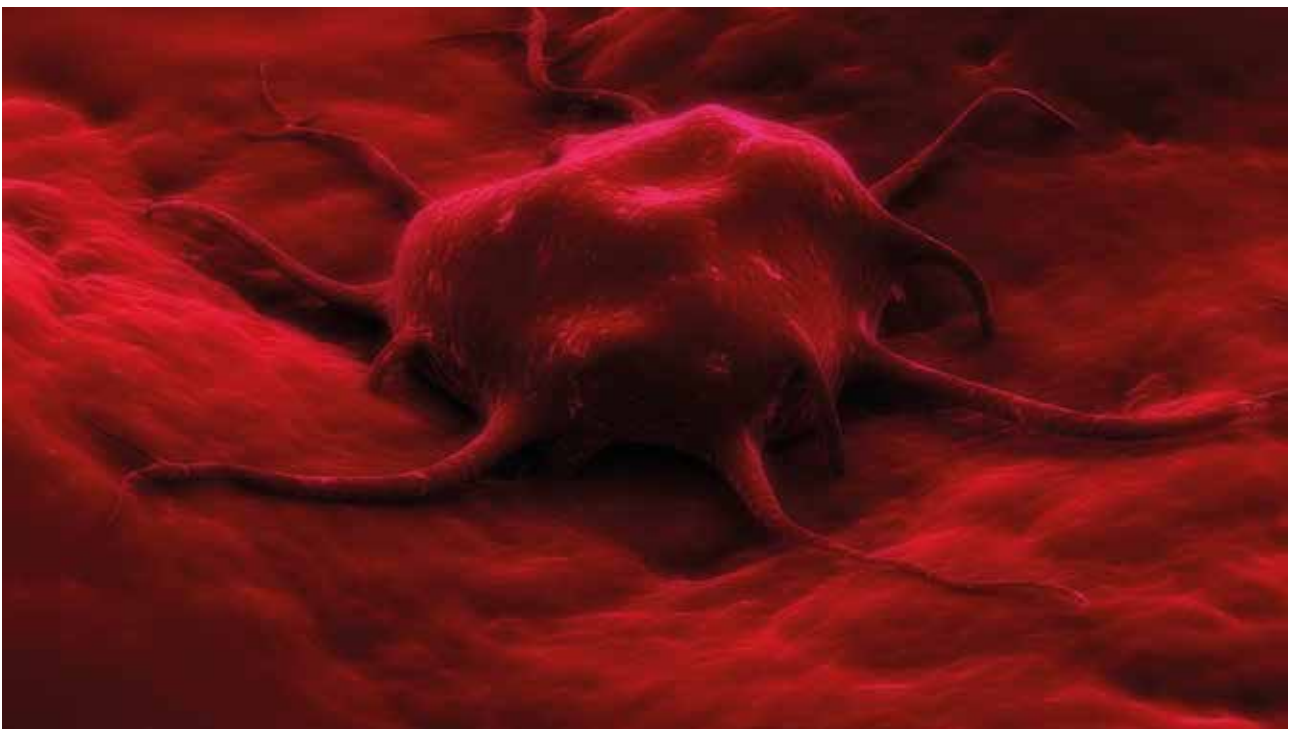
Over the past few years we have come to realize that there might be more than one way to skin the cat – that there might be changes other than genetic changes that would account for the bizarre behavior of cancer cells. And these relate to epigenetics.'

Epigenetic changes – the turning on and off of genes without changing the underlying sequence of DNA – are responsible for a striking metabolic shift within the cancer cell, which involves a major change in the way cancer cells make energy.

This dates back to 1924 when the great German biochemist, Dr Otto Warburg, discovered that cancer cells were doing something strange. Unlike normal cells, they were making most of their energy via a method called 'aerobic fermentation'. Also known as glycolysis, it involves burning glucose (sugar) very fast and making lactic acid in the process. Today this metabolic quirk of the cancer cell is called the Warburg effect.

Cell turns into a sugar-consuming machine

Normal cells make 90 percent of their energy in the tiny power plants found in almost every cell in the body called mitochondria. They use oxygen but do not produce lactic acid. We now know how cancer cells switch to the Warburg effect but the reason why is still hotly debated.



They do it by changing the amount of protein produced by a gene called hexokinase II. The gene does not change, it just becomes more active – this is epigenetics. The result is the cell turns into a sugar-consuming machine.

So, I would challenge anyone to show a single mutation that is a cause of the Warburg effect, rather than a trigger of the epigenetic shift to hexokinase II. The reason why it matters whether the energy production switch is due to a mutation or to epigenetics is because an epigenetic change can be reversed, unlike a mutation.

If you have seen a PET scan, you have seen a visual image of the Warburg effect. A PET scan is done by injecting radio-labelled glucose into the patient. The 'hot spots' that then appear are a dramatic visualisation of cancer's voracious appetite for sugar. This is the basis of a PET scan. Without the ability of sugar to 'gravitate' and become concentrated inside cancer cells, the PET scan would not work. In fact, there is no argument about cancer's love of sugar, which leaves the basic idea behind the ketogenic diet – reducing energy for the cancer cell – unaffected.

Ketogenic effect on cancer cells

Turning cancerous has the effect of re-wiring a cell's energy production system so it becomes more demanding and less efficient. And that opens up many new ways of tackling tumours.

For instance, it is already leading to a less gruelling way of delivering chemotherapy (CT), which comes with a raft of side effects because it damages fast-growing, cancer cells and fast-growing, healthy cells alike. By focusing on the way that cancer makes energy, treatments can be developed that damage cancer cells but not healthy ones.

The original idea behind the ketogenic diet was that it provided the body with an alternative source of energy – one that healthy cells can use but cancer cells cannot because of the changes to their energy production system.

But it turns out that ketones can do much more than supply energy; they are also potent, epigenetic, signalling molecules – that is, they can turn gene activity up or down. And for reasons not yet understood, they 'turn down' about a dozen – maybe many more – cancer-related

genes (oncogenes). They do this by changing the chemical 'tags' on the proteins that package the DNA.

Ketones slow tumour growth in the lab

Ketones engage cancer cells in a sort of epigenetic diplomacy. Certain beneficial genes get exposed and so become more active, while a host of oncogenes (cancer-driving genes) get turned down, causing the cancer cells to behave more like normal cells. Far from being unable to affect genes, it now seems that a ketogenic diet could be having an impressive range of very specific, genetic effects.

A simple experiment highlights this signalling action of ketone bodies: picture two petri dishes with cancer cells. Both dishes have the same concentration of sugar for the cells to use as fuel. When ketones are added to one of the dishes the cancer growth dramatically slows. This is one way we know ketones are affecting cancer cells in ways that go *beyond* energy restriction.

The ketogenic diet is unique among cancer therapies in that it affects healthy cells and cancer cells very differently. The biochemical details of each one are too complex to discuss here, so I will only list them:

- *Cancer cells* are put under energetic stress because they have difficulty burning ketones.
- *Normal cells* are actually energised by the ketogenic diet. Per unit of oxygen burned, ketones generate more energy than sugar.
- *Cancer cells* show many important oncogenes are turned down.
- *Normal cells* show beneficial genes are turned on (many of the same 'housekeeping' genes are turned on by caloric restriction).
- *Cancer cells* have a diminished ability to generate glutathione – the 'master' antioxidant.
- *Normal cells* trigger an increase in glutathione.

Diet cuts damaging chemotherapy side effects

So, how does all this lead to new approaches to clinical treatment? Leading researcher, Valter Longo, of UCLA, calls this strange ability of ketones to make healthy cells healthier and cancer cells weaker 'Differential Stress Resistance' (DSR). Longo convinced oncologists to allow their patients to enter ketosis by fasting (cutting calories

right down automatically cuts carbohydrates) for 48-140 hours before CT and a 5- to 56-hour fast after CT. He then measured side effects. Every one of the 14 most common CT-related side effects was diminished. Of particular note: the fasted patients did not vomit at all and had no diarrhoea – two of the most debilitating side effects.⁴

So, it appears that the ketogenic diet and its ability to create DSR can diminish side effects; but can it increase the efficacy of other treatments? This seems to be where the diet truly shines.

For instance, a substantial and growing block of evidence suggests the ketogenic diet can enhance traditional, standard-of-care treatments such as CT and radiation, by combining them with still unconventional therapies such as hyperbaric oxygen and drugs that affect glucose levels in the blood.⁵

Diet makes CT and hyperbaric oxygen more effective

The ketogenic diet weakens cancer cells by physically throttling back their energy, while simultaneously decreasing the damage done by oxidants by turning up the genes that produce natural antioxidants, such as glutathione. This then makes conventional treatments more effective.

The ketogenic diet (or ketosis via fasting) has been shown in animal models to increase the efficacy of: radiation, CT, hyperbaric oxygen (cancer cells normally thrive at lower oxygen levels than healthy ones), drugs that reduce the ability of cancer cells to make energy from glucose) and giving supplements of ketone synthesised in the lab.⁶

If the benefits of the diet really were a myth, then it is odd that the ketogenic diet is currently being investigated as a cancer therapy in at least 26 clinical trials in the US and around the world, including at the University of Liverpool.⁷

Istanbul clinic shows remarkable results

Just recently we are finally getting glimpses of real clinical data. At the ChemoThermia clinic in Istanbul, Turkey, oncologists are giving their patients a protocol they call metabolically supported CT (MSCT), whose goal is to enhance standard of care by exploiting the metabolic derangement of the cancer cell. This is the protocol:

1. Ketogenic diet
2. 14-hour fast immediately before CT
3. 2-deoxyglucose (this is what is called a glycolytic inhibitor – it makes energy production via glycolysis less effective)
4. Dichloroacetate (DCA) – cheap chemical compound that also interferes with glycolysis. (Crucially, neither affect the different method of energy production in healthy cells)
5. Hyperthermia
6. Hyperbaric oxygen

The results:

- Standard care: median survival: 8.6 months
- MSCT: median survival: 43.4 months! (over 600% increase and climbing since many patients are still alive)⁸

Note: the patients getting MSCT were sicker (all stage 4) than those getting standard care, a group that included patients with stages 3 and 4.

Credible supporting results

Promising as all this is, one criticism – a lack of overall credible data – is correct. At present there are no double-blind, placebo-controlled, phase 3 trials to support the ketogenic diet as an adjunctive cancer therapy. This is the so-called gold standard of proof and the reflex reaction of most mainstream oncologists faced with a possible cancer treatment is to dismiss it out of hand unless it comes with a full Randomized Controlled Trial, which costs millions.

So, the question becomes just how high should the bar of burden-of-proof be set? A growing number of oncologists and researchers now believe it is *insanely* high.

Highly respected oncologists – such as the original pioneers of combining CT drugs, Vincent DeVita and Emil Freireich – have been railing against the absurd criteria that the FDA has arbitrarily established for years as a threshold to approve a new therapy. They point out that good therapies – potentially lifesaving therapies – sit on the side line because they will *never* get the billion-dollar backing necessary to shepherd them through a massive phase-3 trial.

Promising treatments side-lined

Listen to Dr Vincent DeVita (former director of the National Cancer Institute), pioneer of MOPP CT, author or co-author of more than 450 scientific articles, editor-in-chief of *The Cancer Journal* and author of *The Death of Cancer*:

‘At this date, we are not limited by the science; we are limited by our ability to make good use of the information and treatments we already have. Too often, lives are tragically ended not by cancer but by the bureaucracy that came with the nation’s investment in the war on cancer, by review boards, by the FDA, and by doctors who won’t stand by their patients or who are afraid to take a chance.’⁹

And this is what Dr Emil Freireich thinks about the current standard of evidence (he currently holds the positions of: the Ruth Harriet Ainsworth Chair, Distinguished Teaching Professor, Director of Adult Leukemia Research Program, and Director of Special Medical Education Programs at the University of Texas, MD Anderson Cancer Center in Houston, Texas):

‘It’s so obvious that if the FDA allowed us to be rational about treating cancer patients we could move the ball 100 times faster...[Do] you have to do a phase 3 randomized trial? No. If you have evidence that’s clear. If you have an objective response. Objective, progression-free survival. That’s it.’¹⁰

The debate generally centres around drugs rather than non-drugs but it seems that there is substantial evidence that the ketogenic diet is a good, perhaps great, adjunctive therapy. So maybe the ‘lack of overall credible data’ is not as fatal as it sounds.

It appears to enhance the outcome of other treatments while mitigating side effects. It is also completely safe, something most physicians do not appreciate. It has been used for nearly 100 years as a treatment for childhood epilepsy and is currently approved for that use on the NHS.

From my perspective, it seems difficult to make the case against it. It seems to demand the multi-million-dollar trial that is never going to happen. Dr Freireich’s view seems more sane and humane. The ketogenic diet can clearly tick his boxes: ‘clear evidence, an objective response and objective, progression-free survival’. So, the question for orthodox oncology is: why not?

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This article is based on two articles that appeared in February on www.HealthInsightUK.org run by medical journalist Jerome Burne. It was published in *Caduceus* 97.

Travis Christofferson has a degree in molecular biology and is the author of *Tripping Over the Truth*. He lives in South Dakota where he also runs www.singlecausesinglecure.org, which focuses on the potential of metabolic therapies.



Beyond the Brain 2018

CentreEd,
Excel Exhibition Centre,
London

Tim Houlding

A large, enthusiastic and encouragingly broad age-ranged group met at the impressive Excel Centre over the weekend of November 3rd and 4th. Conference directors David Lorimer and Oliver Robinson had collaborated with both The Alef Trust and The Monroe Institute to bring us a terrific array of energetic speakers.

After a warm welcome from SMN Chairman, **Dr Paul Filmore**, and SMN President, **Dr Peter Fenwick**, we launched into **SESSION 1- THE POWER OF INTENTION**. David Lorimer introduced **Lynne McTaggart**, well known to many of us from her bestselling books *The Intention Experiment*, *The Field*, *The Bond* and *The Power of Eight*. Lynne opened with a quotation from Plotinus: "We are in a world that is also within us" and followed with a lucid account of the developments designed to demonstrate the potential power of human intention: from the earliest experiments by Gary Schwartz of the University of Arizona which involved measuring seedling growth to the more recent experiments which specifically intended healing in those suffering from Post Traumatic Stress Disorder (PTSD) and other disabling conditions. Lynne herself went on to evolve a programme in which small groups of "intenders", ideally a group of eight, gathered regularly or connected via the internet in order to intend healing or peace directed at an individual member of that group who had declared a specific need. Reports flooded in of remarkable improvements and Lynne extended her programme by inviting her "Groups of Eight" to intend peace and reconciliation in both war-torn Sri Lanka and a particularly violent area in the USA- North St. Louis, Missouri.

Lynne was at pains to emphasise what she calls "The Mirror Effect"; this is the extraordinary and unbeckoned benefit experienced by the intenders. She equated these mirrored benefits to Durkheim's "collective effervescence" and pointedly stated: "Prayer is good for you when it's NOT about you !" She exhorted us all to "Get off of yourself and help another!"

Lynne gave us two very moving accounts of mirror-effect transformation. Firstly, she told us the story of Wes, a 65 year-old US Army veteran, who volunteered as an intender even though he himself was perpetually haunted by his Army war experience. Over two nights, he experienced lucid dreams which reconciled himself to his 19 year-old self, reconnecting to his youthful hope, joy and optimism. In a brief video-clip, Wes, now transformed, told us of his renewed enthusiasm for life, that chores had become fun, that flowers and trees became iridescent and how he now actively sought out human contact. In a much wider study, Lynne set up a Middle East Peace Intention Programme involving many Groups of Eight. The effects on both recipients and intenders were dramatic!

Lynne encouraged us all to become "connected"; to tolerate people who superficially may not seem like us; to pursue thoughts and intentions which, like the Sufi and Buddhist monks reported by Dr Andrew Newberg, deliberately blur



distinctions between “me” and “not me”. For Lynne, the benefits that descend are for everyone- recipients and intenders- in our loosening of “separateness”. Lynne closed with a short experiential session involving we gathering into groups of eight and intending healing for one self-chosen member of each group.

Dr David Luke, senior lecturer in psychology at the University of Greenwich, joined Lynne on the stage for a mutual discussion. Lynne again emphasised that the simplest of support from surrounding people imbues trust and love and that, furthermore, highly specific beneficent intention can have remarkable effects for all participants. Dr Luke interestingly brought up the subject of mal-intention and its negative effects on both recipients and intenders. Lynne closed with her repeated request for fairness in human transactions and our greater connectedness as a superordinate goal.

Session 2- Challenges For Transpersonal Psychology.

Dr Jessica Bockler and Professor Les Lancaster from The Alef Trust drew us into the unprecedented challenges of our modern world: populism, extremism, mass migration, climate change, division and polarisation. Jessica explained how the perennial “Hero Myth” is very masculine with an outreach that often amounts to “conquering”, creating aggressive tribalism and strident voice and action. She alluded to Ken Wilber’s ideas on the second

phase of a “post-truth” world which becomes increasingly self-oriented and narcissistic.

Being committed to transpersonal psychology, both Jessica and Les invited us to see our own experiences in a much expanded context of the global, indeed the cosmic. They encouraged us to consider increasing our perspective and our maturity by dwelling on our purpose, our intention, our discernment and our sense of responsibility. They drew us towards the integrated collective, fashioned by transpersonal will and intention. They drew on the vision of Assagioli whose vision of Universal Will plunges us into the mystery of being, transcending the limitations of our ordinary personality through love, compassion and beauty, drawing us towards the “Intuitive, direct experience of communion with the Ultimate Reality”.

Les then introduced three Masters students studying with The Alef Trust, each of whom brought their perceptions to challenge the erosion of human values by materialistic science. **Dagmar Suissa** opened with her thesis which explores the essence of how studying transpersonal psychology induces inner transformation. Dagmar examined students’ readiness to be transformed, showing how a synchronisation of the outer educational setting and inner open-ness to change is vital. She used the rather beautiful expression “Letting Go and Letting Come” and drew on the ideas of Jack Mezirow- continual transformation as we shift our frames of reference. Dagmar moved on to concepts within the

educational system itself: balance of being and doing; balance between challenge and support; time for reflection; collaborative forms of learning which engage mind, heart and hands. She profoundly challenged the overweight of pedagogic ways of teaching and spoke of altruistic, collaborative learning with more space for the experiential in the endeavour to promote a flowering of the authentic self.

Chantal le Roux, via Skype from South Africa, delivered her paper on the transformative potential of NIA- Neuromuscular Integrative Action- first proposed by Rosas in 2009. Chantal had performed her study on a small sample of six experienced NIA practitioners in order to evaluate: the transformational benefits of movement practices; value of the body as a “life partner”; importance of self-regulation; changes in quality of interpersonal relationships; transformation through embodied principles; increase in spiritual connection to the Universe; healing the world through disciplined, thoughtful, intentioned practice. Chantal then spoke of her own commitment to NIA which, for her, had become a sacred mind-body journey.

Sunita Pattani gave the third and final paper on her explorations of what she generically described as “Emotional Freedom Techniques”. Sunita had chosen “Tapping”, a highly developed system of tapping specific parts of the body based on Chinese Shaolin and Taoist healing principles. She included in her thesis an extension of these ideas called “Surrogate Tapping”, a system of tapping one’s own body but oriented specifically and intentionally to benefit another. This system, developed by Feinstein, has the benefit of allowing a practitioner to direct healing towards children and animals.

Like Lynne McTaggart, Sunita asked the profound question: “Is there a transformation for the practitioner?” Sunita’s comments on this aspect were most interesting: “The benefits for all increase when I, as practitioner, step back. Things are better when I’m not attached to an outcome. I need to get out of my own way!” Sunita concluded with an invitation to trust whatever comes through. As Lynne had

emphasised, the participant experiences a different inner state totally irrespective of distance; thus, non-local influences abide.

After a break, **Dr Rosalind Pearmain**, author of *The Heart of Listening- Attentional Qualities in Psychotherapy and Counselling* led us through a heartfelt meditation which focused on the heart to bring us to the deepest source of intelligence and connection which integrates inner and outer aspects of self and the world.

The final discussion of the day was a lively interaction via Skype with **Dr Raymond Moody**, arguably the most significant modern exponent and explorer of Near Death Experiences (NDE). Ray is known world-wide for his books: *Life After Life*, *Glimpses of Eternity*, *The Light Beyond*, and *Coming Back*. Ray began by commiserating with Professor Stan Grof who had been due to join us by Skype, but who has sadly suffered a stroke from which he is recovering steadily. Ray then gave us a brief biography of his early university days, attending the University of Virginia initially to study astronomy, then a fascination with philosophy inculcated by the inspirational Dr George Ritchie. Ray proceeded to medical school in 1972, thus capping an extraordinarily broad education. In a vibrant interactive discussion, various questioners, including Peter Fenwick, Eben Alexander, Paul Kieniewicz, David Lorimer and Marilyn Monk, posed some fascinating questions. Ray spoke of his enthusiasm for young people, arguing that the young do not see transcendental experiences as surprising. Ray went on to describe some of the archetypal features of NDEs as perceived by attendant loved ones. These include lucid periods, even in those suffering from severe dementia; pre-death rallies where the dying person becomes much enlivened, sometimes exclaiming the presence of a pre-deceased loved one welcoming the dying person; an emanation of light from the dying; a dying person speaking of hearing beautiful music, captured by the lovely expression "Swan-Song".

During this very vibrant Q and A session, Ray proposed what many of us feel is a deeply intelligent and insightful thought. Ray encouraged us to go beyond the literal logic of

Aristotle; to go beyond the literality of common language; to celebrate the idea that connecting with the transcendental means we should accommodate the unintelligible and embrace a "sense of nonsense". Ray proposed that we may need a metalanguage to describe the realms beyond and he is confident that such language will emerge, but warned us that we will need a massive widening of our present intellectual and sensory constraints! These thoughts were very strongly endorsed by Eben Alexander. Ray went on to link these ideas to both the ancient Greek "Mirror Technique" and to Lord Geddes' concept of A and B consciousness. Furthermore, Ray encouraged an open-mindedness to experiences of synaesthesia where there is a cross-talk among different sensory modes. In conclusion, this was a seminal master-class from one of the greatest contemporary pioneers of extended experience. To use David Lorimer's phrase: "A true tour-de-force !" Thank you, Ray !

Session 3- living in a mindful universe.

Our Sunday opened with a warm welcome from Peter Fenwick to Dr Eben Alexander and Karen Newell, co-authors of *Living in a Mindful Universe: A Neurosurgeon's Journey into the Heart of Consciousness*. Eben began by telling us of his combat-surgeon father who maintained a strong belief in a personal loving God. He then described his sudden, life threatening bacterial meningitis which, by day seven of this illness, had left him with demonstrable brain damage to all eight lobes of his brain, with a chance of survival of 2% and a high probability of permanent brain damage. His initial experiences of regaining consciousness were of himself as an empty slate with no personal memories and no recall of his family. Semantic knowledge gradually returned over eight weeks.

The evolution of Eben's most vivid NDE is remarkable: an initial sensation of seeing with an earth-worm's eye-view and, within this darkness, a perfect white light, manifesting with vibration and music. Eben describes this as a "Gateway Valley" where he sensed by identification, not by the common senses. His strong feeling was: "Self is a fiction ! But we need skin-in-the-game to experience

pain and loss." The Life Review for him was profound, where he experienced what others would have experienced of his actions and thoughts. In coming through this Review, Eben experienced overwhelming love, mercy, kindness and acceptance and a powerful thought that "Love is THE operating principle".

His NDE extended to an exquisite impression of a specule of awareness on a butterfly-wing, sparkling waterfalls, great joy and a manifestation of The Godhead as a Divine Breeze. He encountered a beautiful woman on the butterfly-wing who reassured him that he would be taken care of and loved forever. Eben described the heavenly realm as intensely colourful and musical, with what he described as "Deep Time" being totally different from our routine, multilayered time. He described an intense experience of "The Core", a realm of "dazzling darkness", wherein the essence of infinite creativity flowers.

Eben experienced our normal consciousness as a small trickle, with the immense sea of fuller consciousness all around us in what is, essentially, a Mindful Universe. He closed his superb talk with an exhortation to all of us to remember that our physical and mental health depends on our spiritual truth. He alluded to our secular vacuity trying desperately to fill spiritual needs and therefore how each of us can bring more true light into the world. He foresaw the stretch of evolution ahead of us inviting a focus on meaning and purpose with increasingly communal and co-operative thought and action. He echoed Ray Moody in reminding us that our linguistic brain can often get in the way- Michael Singer's "annoying room-mate !" Reassuringly, as Eben has experienced so acutely himself, he was able to proclaim: "ALL IS WELL !"

Pim van Lommel then took up the reins, drawing us in to contemplate his chosen theme: The Continuity of Consciousness. Pim is author of *Consciousness beyond Life*, a bestseller now published in many languages, including Chinese, which describes his documentation of NDEs which he encountered whilst working as a cardiologist in Arnhem, Holland. Pim's interest in NDEs was aroused in 1969 when twelve out of fifty patients who had



David Luke and Lynne McTaggart



Dr Pim van Lommel and Dr Eben Alexander III

suffered a cardiac arrest recounted extraordinary experiences. He gave us an account of a prospective trial of 344 patients across several Dutch hospitals commencing in 1988. In this study, 18% of patients reported an NDE, with 12% of the whole group reporting significant classical features such as a tunnel with light, extraordinary colours and vibrations, welcome by pre-deceased loved ones and life review. He described the often quoted experiential benefits post-NDE: belief in the afterlife; increased compassion, love and acceptance; enhanced sensitivity; enhanced appreciation of life; acquiring spiritual gifts; greater interest in spirituality.

Pim cautioned us, however, that some NDE experiencers can feel traumatised, leading to depression, homesickness and loneliness, particularly when experiencers have no confidants with whom they feel safe to share. In some instances, there is an acute experience of pain and constriction on returning to the physical body.

Pim moved on to the interesting sphere of how science may view extraordinary experience. J.R. Oppenheimer, the distinguished US physicist, spoke wisely: "There is no place for dogma in science. The scientist is free and must be free to ask any question, to doubt any assertion, to seek for evidence." Pim expounded on the concept of non-local consciousness rooted in a non-local realm and that whole and continuous consciousness is not observable in our ordinary world. Present day technologists recognise perfectly well that the instruments which encode information into electro-magnetic

fields- "the cloud"- are receiving and collating, NOT PRODUCING the information. Why, then, does the materialistic hypothesis maintain that memories and consciousness are PRODUCED by neurons? Pim propounds the much more intelligent argument that neuronal structures have a facilitating function- in William James' words: "a faculty of admission and transmission." Pim quoted three of the great scientists of the twentieth century- Sir John Eccles, Sir James Jeans and Max Planck- who would support the extended, if not fundamental, nature of consciousness.

Pim closed with the acknowledgement that, in Europe, 55% of the population believes in life after death and left us with two great quotes:

"Our ideas about death define how we live our lives" and "When the power of Love becomes stronger than the love of power, our world will change!"

After a refreshment break, Karen Newell, co-founder with Eben Alexander of SACRED ACOUSTICS, led us into a taster session prior to their full workshop conducted on Monday, November 5th. Their theme is Journey into the Heart of Consciousness. Karen explained that accessing the infinite awareness of the Cosmos through meditation strengthens our heart connections and soul perspective and allows us to live beyond the illusions of the physical world. Karen introduced us to the Golden Rule: "Bring love into your own heart to bring love to others." She spoke of Great Love as a birthright for us all and spoke of finding a

balance between our female/male aspects- a celebration of Yin/Yang, Moon/Sun. She led us through the deep sounds of her Sacred Acoustics programme with the invocation of finding peace within, leading to peace without.

Session 4.

Jade Shaw and Charlie Morley welcomed us to their theme of The Science and Spirituality of Lucid Dreaming. Lucid dreams (LD) are defined as dreams in which the dreamer knows that she is dreaming; it is denoted as a hybrid state of consciousness with measurably distinct EEG signals. Charlie gave us a brief account of the scientific history of LD. The first academic study took place in 1959, followed by Dr Keith Hearne's study in 1975 of eye movements. By 1981, Dr Stephen LaBerge was conducting EEG studies. In 2012, the first functional-Magnetic Resonance Imaging (f-MRI) demonstrated significant activity in the right dorso-lateral-prefrontal cortex. Various studies from 1990 to date have shown significant positive effects in aspects as variable as athletic training and healing of severe PTSD. These studies have shown integration of psychological trauma, elements of physical healing, reduction of limited self-belief and healing from inner-child work. Charlie likened the experience of LD to Sufi-Lucidity and Tibetan Dream Yoga.

Jade, who experienced an out-of-the-body-experience (OBE) in 2014, drew some interesting contrasts between LD and OBE. She alluded to her own experience, telling us of her distinct departure



Charlie Morley and Luigi Sciambarella



Jessica Corneille and Martin Redfern

from her physical body and her perception of flashes of light and a sense of being in a vibrational state. She used the term Subtle Body for her discarnate state and clarified that, for her, time dissolved, unlike most sensation in LD where time is perceived as normal. She experienced communication during her OBE as being telepathic. We very much enjoyed Jade and Charlie's very enlivened and energetic talk.

As an interlude, Ben Gross introduced us to The SMN Wider Horizons Camp for Young People. This interesting project is aiming to attract 77 18-21 year-olds to a transformational weekend in nature. The project aims to create a village community as preparation for adulthood. The focus will be on community-ship, addressing a healthy balance of heart and head and addressing the challenges that young people face. It will be a celebration of becoming a responsible adult. The weekend is planned for September 8th and 9th, 2019 and the project email is: interrainbow@hotmail.com

Our final talk was given by **Luigi Sciambarella** with a title of *Cultivating Free-Will Through the Exploration of Consciousness: The Work of The Monroe Institute*. Luigi spoke of our constrained free-will in our earthly existence and gave a vivid account of his own journey inwards. He has spent sixteen years journaling his dreams, which for him, has provided a very rich mirror to his life. His own academic studies have included psychology, hypnosis and psychotherapy and he has co-created a programme for LD and OBE. His expanded experiences began when he was 7 years old

when he experienced an OBE with a bright overwhelming light. His Grandmother appeared. Quite extraordinarily and simultaneously, his 10 year-old brother experienced an exactly similar OBE.

Thus fascinated, Luigi was destined to explore expanded experience and chose The Monroe Institute. This organisation was founded by Bob Monroe in the 1950s in the USA. Bob was a radio-host, always intrigued by expanded consciousness. He researched sleep learning and experienced his first OBE in 1958. His interests expanded and he founded the Institute in 1973. Since then, the Institute has developed a strong relationship with the University of Virginia. Monroe has developed the Hemi-Sync-Technique which involves playing two different tones, one to each ear whereupon the brain produces a third sound. This technique allows ordinary people to explore beyond the limits of physical senses and routine consciousness. Luigi emphasises that there is much inner work to be done.

Luigi took us through the impressive results of both qualitative and quantitative studies. In a study which focused on Remote Viewing, significant results were obtained at a level of 0.007 probability that the results were due to chance alone. Gantt et al have worked on programmes which address PTSD. The Institute is furthering its work into psychokinesis and exploring the electro-magnetic fields around known healers. Luigi then detailed the programmes which begin with developing OBE and LD techniques with the specific aim of enhancing wholeness, holistic awareness and

the ability to focus on the NOW. He has a great strapline for these programmes: "Step forward into Growth or Backwards into safety!"

Luigi was particularly articulate in describing how Lucid Dreamwork can help to integrate the Shadow. He described how changing the inner filter can change our perceptions of the outer world. He strongly encouraged us to view our journey as a PROCESS, not a structure and willed us to contemplate exploring the UNBORN, moving into the darkness through what the Zen Buddhists would call "The Gateless Gate". He reminded us that we do have free-choice, but that our past conditioning limits our decision space. He invites balance, acceptance and non-judgementality. He gave a final homily about Waking Up and Growing Up: Be present in your body; describe, not prescribe; own your own emotions; don't force your will.

These marvelous thoughts were strongly reinforced by David Lorimer who, in his final comments to us all, spoke of THE OUTER REACHES OF INNER SPACE. David left us with the encouraging words that we have more power of intention, individually and collectively than we can imagine and that the Universe is calling us to TRANSFORM!

This was a fitting end to a superb conference made possible by the exceptional vision and hard work of David Lorimer, Oliver Robinson, Chiara Reghellin, Lana Sackwild, Martin Redfern, the ever gentle Paul Filmore and all the contributors and speakers. Thank you to you all!



The Quest for Harmony

A unifying principle
in spirituality, science,
sustainability and healthcare

70th Birthday Celebration for
HRH the Prince of Wales

Saturday 17th November 2018

Canterbury Cathedral

Edi Bilimoria



Is it just a cosmic coincidence that the ancient kingdoms of exemplary rulers like Ashoka the Great in India and Amenhotep III in Egypt were periods of economic prosperity and peaceful coexistence because their rulers united their empires by inculcating a universal outlook on life, religious tolerance, and cultural diversity? Obviously not. In which case, we in the United Kingdom are similarly blessed with a unique opportunity and priceless gift in the modern equivalent of an imminent sovereign whose life's mission is to better our lives through similar principles underpinned by and actuated through a deep understanding of 'a unifying principle in spirituality, science, sustainability and healthcare', as per the subtitle of the conference. How were these key themes represented? Following introductory remarks, the day was organized into the morning sessions illuminating the philosophical basis of 'The Quest for Harmony'; and the afternoon sessions devoted to their practical application on living in harmony with nature regarding food and agriculture, health and wellbeing, education; and our relations with the Commonwealth.

The Dean of Canterbury Cathedral warmly welcomed us, emphasizing the long connection between HRH the Prince of Wales and Canterbury, a place he loved because of its atmosphere of balance and harmony plus sense of community. Peter Fenwick, President of the Scientific and Medical Network (SMN) then lit the candle encouraging a few moments of silent reflection. After that, in his moving Introductory Overview, David Lorimer, Programme Director of the SMN again spoke of HRH's love of Canterbury and explained that the Prince's views on spirituality, ecology and science were all subsumed in the *sense of the sacred*, so that both the secular and the spiritual/religious were advocated – not an either/or.

Showcasing the 'Temenos Academy: Harmony – Creating Cohesive Spaces and Communities from Nature's Geometry' were the writer and BBC radio presenter, Ian Skelly and architect and co-founder of the Temenos Academy, Prof Keith Critchlow by film. The Temenos Academy, of which HRH is Patron offers education in philosophy and the arts in light of sacred traditions of both East and West and this

impetus – enacting this wisdom, not just reading about it – formed the backbone of HRH's magnificent book *Harmony* co-authored with Ian Skelly and Tony Juniper on sale alongside David Lorimer's earlier pioneering book *Radical Prince*. Ian stressed that the perennial philosophy of all cultures articulated the same essential truths that the march of materialism has eroded and thereby starved the richness of our inner life. Socrates said that geometry is the art of the ever true. Accordingly, unique insights were provided into the various dimensions of geometry moving from ownership, to intellectual, to philosophical and to sacred. Naturally, sacred geometry, proportion and the golden ratio were central themes as was the blending of the traditional with the contemporary. It is tradition that gives access to our soul. If our town planners better understood the importance of tradition – not to worship the ashes but tend to the ever-living flame – we would not have the kind of brutal architecture that separates the individual from the community. They need to be reminded of Blake's counsel not to seek with, but through the eyes.

Speaking for 'The Resurgence Trust: Harmony and a Regenerative Future' were the co-founder of Schumacher College and long-term peace and environment activist, Satish Kumar – *The Prince's Perspective on an Eco Paradigm* and the sustainability advisor and environmentalist, Dr Tony Juniper, CBE – *From Despair and Decline to the Restoration of Hope: how the idea of Harmony can help us recover Nature's health*. Satish's impassioned address forcefully demonstrated that the cure to the disease of the Cartesian separation of nature from the human (with the assumed right of the human to manipulate nature) was the Trinity of Harmony: *soil-soul-society*. Furthermore, that *humus*, 'of the earth', 'soil' is the etymological root of 'human' and 'humility' – and without humility there can be no humanity. Our happiness depends on harmonious co-operation with nature and it is HRH's insight that has drawn attention to the stupidity of turning the rich diversity of nature into division resulting in arrogance begetting conflict. Thereafter, Tony Juniper mentioned that HRH is the only person who has consistently maintained a public awareness of the *crisis of perception* not achieved by any government or environment minister. It is this singular endeavour

that has united people, as opposed to the politics of division. Apparently, a 2 degree centigrade increase in global climate could result in 99 percent of the coral reef being lost (indeed the Prince gave an impassioned address at the meeting of the International Sustainability Unit¹). Cutting down rainforests for short term economic gain is a disaster as these forests harbour a wealth of ecological diversity and help sustain the health of the 'planetary house' on which the health of humans critically depends. Our schools should place less emphasis on academic history and biology; instead, our children should spend more time outdoors and learn to read the Book of Nature with head and heart united.

After lunch, 'The Sustainable Food Trust: The Future of Food and Farming' was represented by its Founding Director and Chief Executive, the biodynamic farmer, Patrick Holden, CBE – *Healthy Food in Harmony with Nature*

and Honorary Life Member of the Soil Association Council and past Committee member on the Royal Agricultural University School of Agriculture Advisory Board, David Wilson, LVO – *Agriculture in Harmony with Nature*. Who better to give us hands-on insights on sustainability, organic farming and biodynamic methods than David, the farm manager of Duchy Home Farm in Tetbury, which epitomizes the Prince's belief of working according to organic principles. These days, food and farming tend to be separated in the public perception; moreover, our relation to food defines our relation to the planet. David issued a stark warning about genetically-modified (GM) crop like wheat, oats, beans and rye because of a loss of genetic diversity. But food companies obviously want uniformity – the enemy of diversity – and the health industry pays scant attention to food. So also livestock, where cows are genetically programmed for milk production



David Lorimer



Richard Dunne



Dr Rosy Daniel

at more than double their natural rate – otherwise known as progress. The remedy therefore is to appreciate the interconnection of all life, understand the link between soil and health, encourage genetic diversity, better understand the effects of chemicals, reduce meat consumption, thus progressing from humility to wisdom to enlightenment. Patrick Holden then invited us to observe two minutes of silent introspection. He underscored a recurrent theme: a crisis of perception leading to the crisis of separation. The Prince's book provides a cosmological framework and shows the role of interconnection. The food business knows that they need to change their ways and it is HRH's dream that Home Farm, as a living demonstration of a mini-ecosystem based on harmony in practice and an educational centre would show just how that change could happen. Patrick also mentioned how music and the philosophy of Jiddu Krishnamurti and Rudolf Steiner provide helpful bridges between the inner and the outer world.

After tea, 'The Health and Wellbeing Trust: Harmony, Healing and Integrated Healthcare' could not have had a better spokesperson than the medical director of the famed Bristol Cancer Help Centre Dr Rosy Daniel – *Harmony, Healing and the Greening of our People*. The Prince once remarked, 'I love coming to the [Bristol] Centre Rosy to see the light in people's eye'. Rosy calls this love-light: when we are filled with it, *our immunity rise*. In this vein, Rosy took us from the 'illness journey' to the 'wellness journey' of which the ingredients are emotional support, a mind-body approach, physical exercise, aerobics and yoga, spiritual healing and spiritual mentoring, and health and lifestyle counselling. On the premise that our body knows how to heal itself the Centre works in both the art and science of healing, teaching right relationship: to ourselves, to each other, and to the earth and divinity. But unless we change conventional attitudes to healthcare and deal with the 'politics of health', a storm is brewing due to changes in lifestyle and an ageing population. Fortunately, there are signs that the tide is turning: principally the new paradigm in physics where quantum physics meets metaphysics; the mounting evidence about epigenetics and morphic fields; the proven program created by Dean Ornish to prevent

and reverse chronic diseases with lifestyle changes; the researches of the Nobel biologist Elizabeth Blackburn; and the efficacy of prayer and meditation. Rosy's resounding concluding message to the Prince was: 'You have got it right, not meddling, but motivating. You live your message: the GM-free zone at Highgrove. We love you and honour you. Long live the Prince of Wales'.

In Applying the Principles of Harmony to Learning, Richard Dunne, head teacher of Ashley CofE Primary School, an Ofsted graded 'Outstanding School' with over 500 children addressed the question on how HRH's vision of harmony could be translated into education, such that children were shown a new way of looking and learning about our world. He asked us to consider what might we learn from a tree, its many varieties and the ecological colony it supports like the bees. In so learning to look at the world through new eyes, Richard stressed the principle of interdependence by joining learning together instead of silo learning. Due cognisance of the cycle of the seasons and phases of the moon are part of an understanding of the principle of sustainability. Valuing diversity helps to understand the principle of adaptation. Health and happiness are the goals of good education and an understanding that wellbeing springs from rendering a spiritual dimension to our lives. We need to nurture children as the leaders of the future to effect a 'Sustainability Revolution' demanding a revolution in education spearheaded by the Prince's wisdom and courage which has set the bar high.

Lastly, the educator and proponent of philosophical Universalism, Nicholas Hagger quite rightly referred to our imminent monarch as King Charles the Wise and assured us that as Head of the Commonwealth, HRH would work actively on the international scene to promulgate HARMONY.

Finally on reflection, it is the hallmark of the mechanistic worldview that so dominates governments and Western society in general that economics and technology on their own can improve the world situation and the human lot. This conference made it abundantly clear that this is just topsy-turvy thinking: modern science, bereft of spirituality does

not teach what existence is about and is the cause of much of our contemporary problems. We cannot have a better world without better humans and it is only through understanding the deep nature of the human being at all levels – physical, of course, but primarily through soul and spirit – that the accumulated marvels of science, technology and medicine can be used with wisdom rather than the commercial acquisitiveness that characterizes so much of their contemporary application resulting in the degradation of the soil, water and air on which all living creatures depend.

Choral Evensong with music from Parry, the Prince's favourite composer, reminded us what only music, the Queen of the Arts can convey in ineffable tones: that Harmony is not just consonance but dissonance alongside consonance. *Both* are needed concurrently – and dissonance is not discord.

The wine reception, intellectual stimulation, and above all, the immense feeling of goodwill and vitality in the atmosphere were all due to one man whose sincere mission is to enhance harmony throughout the world by honouring the sanctity of all life. For as we heard from Keith Critchlow, 'He will endure because he is a Man of Truth'; and the Prince's unwavering conviction to move our perceptions from disconnection to interconnection via reconnection, in the face of much public misunderstanding driven by cheap journalism, encapsulated in David Lorimer's closing quote from Martin Luther, 'Here I stand, I can do no other'.

Our wholehearted thanks go to all the workers, especially Chiara and Michelle, to Charbonnel et Walker as sponsors and the five organizations named above who collaborated with the SMN on this irreplaceable 70th Birthday Celebration for HRH the Prince of Wales who surely will have been touched by the flood of messages of congratulations and goodwill signed by the delegates on two enormous birthday cards on 17th November 2018.

¹ HRH The Prince of Wales, 'Increasing Reef Resilience Through New Collaborative Models', *Paradigm Explorer*, No 127, 2018/2.



Catalysing a Paradigm Shift – Continental Meeting, Bagni di Lucca

Joe St Clair

From 28th September to 1st October 2018 the Scientific and Medical Network (SMN) and The Laszlo Institute of New Paradigm Research (L-INPR) joined forces to present a joint conference entitled “Catalysing a Paradigm Shift” in a stunning location in Northern Italy.



The conference took place over three days at the Laszlo Institute which is based at the ‘Villagio Globale’ (Global Village), a beautiful building in the ancient spa town of Bagni di Lucca in the mountains of Northern Tuscany. In 1825 the original building was designed as a hospital built over natural hot water mineral springs, where for centuries people from all over Europe have come to ‘take the waters’ to improve their health and circulation. The Villagio Globale has been used as a retreat and courses centre since 1993 and was one of the very first locations in Italy to offer courses in yoga, mindfulness, meditation, consciousness and similar topics. Located beside a sacred chapel and mountain stream the venue provided the perfect location for the first joint conference of SMN and the Laszlo Institute with speakers selected by both organisations.

The conference, jointly hosted by **David Lorimer**, SMN Programme Director, and **Joe St Clair**, Laszlo Institute Managing Director aimed to bring together leading thinkers connected to both organisations to give presentations related to the main theme of the conference ‘Catalysing a Paradigm Shift’. Both the SMN and the Laszlo Institute have hosted many conferences

based around ‘new paradigm thinking’ which explores new ways of looking at traditional subjects in the context of creating more open and holistic viewpoints about world issues. The conference therefore posed the question, “How can we use this new thinking to make meaningful change in order to create a better and more sustainable planet”? i.e. how can we catalyse this knowledge to create a new paradigm shift for the benefit of all mankind?

After the initial welcome from David Lorimer and Joe St Clair the conference was opened by **Professor Ervin Laszlo**, author of 94 books and the founder of the Laszlo Institute, who spoke about the increasingly urgent need for new thinking about what it means to be human on a troubled planet. For many years Ervin has spoken and written about the need for a more holistic and spiritual understanding of who we are as a species and our inherent connection to the world around us at an energetic level.

This introduction perfectly set the scene for the first presenter, cosmologist, planetary healer, futurist and international author, **Dr Jude Currivan**. Jude based her presentation on the themes from her latest best-selling book ‘The Cosmic Hologram’ and how the latest

scientific findings from quantum physics and cosmology are changing the ways we understand the nature of 'reality'. Jude explained how the hologram represents a form of reality that helps us to understand how 'information', in the widest sense of the term, can be digitised in a technical format in a similar way that Planck level quantum information is stored in a pixelated form that informs the structure of our universe. Jude explained how we need to restate and expand the laws of thermodynamics as laws of 'infodynamics' in order to reconcile quantum and relativity theories to show energy-matter and space-time as complementary expressions of information. Jude's presentation concluded by stating that mind and consciousness is not something we *have* but rather, they are what we and the whole world *are*. This therefore begs the question; 'What are each and all of us going to do with this profound knowledge?' The future of the planet is, without doubt, in the hands of every single one of us.

The next speaker, **Federico Faggin**, worked for the Intel Corporation from 1970 to 1974 where he designed many products - including the world's first microprocessor, the Intel 4004 and the 8008, 8080 and 4040 microprocessors. Federico is now President of the 'Federico and Elvia Faggin Foundation', a non-profit organisation dedicated to the scientific study of consciousness. Federico's talk was entitled 'The Fundamental Differences Between Human and Artificial Intelligence' and served to explain the many differences between human consciousness and intelligence and how it differed from the technical 'Artificial Intelligence' (AI) used in advanced computer and robotic technology. His fascinating presentation included an in-depth examination of symbols, information and quantum field theory and demonstrated why AI could never replicate human thought.

The next speaker, **Dr Dietmar Rothe**, has more than 35 years' hands-on experience of R&D in physics and high-technology, including 25 years in the 'High-Energy Laser' field. He has contributed to many branches of the physical sciences, ranging from atomic physics, plasma physics, optics and spectroscopy, to laser physics and pulsed power technology. He also worked

at the Cornell Aeronautical Laboratory in Buffalo, NY, where he conducted post-doctoral research in basic physics related to the emerging Space exploration field. The title of his talk was "The philosophical aspects of consciousness" which explored the inseparable relationships between consciousness, life, and spirit and why an increasing number of scientists and philosophers are recognizing the presence of a near-infinite, non-material, omnipresent 'Cosmic Energy Field' that is the source of 'All-That-Is'.

Dr Susan Jamieson is a physician who specialises in connecting Eastern and Western healing philosophies regarding mind body and spirit to serve as a bridge between science and spirituality in catalysing patients' wellness. Her presentation covered concepts of healing including 'presence', 'distributive consciousness' 'shifting from singularity to plurality', 'The coherence of brain hemispheres and brain-heart' and the 'coherence of therapist heart waves with both brain hemispheres through intent, allowing, resonance and inductance'. Susan explained how we are inherently attuned to a quantum process and interpret/interface with these surrounding energies unconsciously on a daily basis. The scientific and biological/physiological basis of this is that our bodies are regulated by, and communicate through, a light network on a DNA, cellular and enzyme basis. Susan proposed that on an unconscious basis we interface with these light energies as well as those of the natural world, connecting to the light of the Earth's magnetic field. Her conclusions were that true wholeness and healing could only be reached through embracing our own wholeness and acknowledging the innate interconnectedness of all things.

Professor Harald Walach is a researcher at the interface between medicine, psychology and consciousness studies. He is founding director of the 'Change Health Science Institute in Berlin' and holds a double Ph.D. in clinical psychology and the history and theory of science. His presentation was entitled "Towards a post-materialist science" and started with a summary of current world issues including climate change, the global ecological crisis and the lack of a fair and equitable distribution of goods. The presentation

argued that we need not more of the same, but a different type of rationality to tackle these problems. Such a broadened type of rationality will emerge once we allow ourselves to question the implicit and mostly unconsciously held beliefs about the structure of science. Professor Walach then explained why it is necessary to integrate consciousness, and hence subjectivity and inner experience as a mode of relation to the world, into the scientific remit. Once we do this, a lot of human experiences – spiritual experiences, experiences of value and meaning, subjectivity in shorthand – will become part and parcel of the scientific enterprise and expand both the scope and methodology of science.

Dr Nitamo Montecucco MD, PhD is the Director of the 'Institute of Neuro-psychosomatics', a researcher in neuroscience and psychosomatic therapy, Professor of 'Psychosomatics' at the 'University of Medicine of Milan' and the 'Center for Complementary Medicine' at WHO (World Health Organization) and Visiting Professor of 'Neuro-psychosomatics' at the University of Pavia. His presentation was entitled 'Brain, Emotions and self-awareness – a new psychosomatic approach to wellbeing' and provided a fascinating insight into brain coherence in relation to meditative and relaxed states.

Dr Bobbi Stevens holds doctorates in both Psychology and Business Management and is the Co-founder and CEO of "Unlimited Futures LLC" an organisation that has been providing programs for the development of human potential for 30 years. Her presentation, "Making sense of the chaos", posed the question "What is happening in the world today? Why it is happening? And most importantly, "What we can do to change it?". She then went on to look at world issues and how a new type of thinking is essential to our survival.

Mária Sági holds a Ph.D. in psychology at the Eötvös Loránd University of Budapest and was awarded the C.Sc. degree (Candidate of the Hungarian Academy of Sciences). Dr. Sági developed the information-medicine protocol pioneered by Austrian scientist Erich Körbler into an encompassing method for diagnosing and treating human



health problems. She is the author or co-author of eleven books and over one-hundred and fifty articles and research papers. In her presentation she gave a practical demonstration on how she uses the Korbler rod to diagnose and treat all manner of physical ailments.

Kelly Schwegel then gave an animated and passionate presentation called “The art of inner alchemy” showing the relationship between the alchemical process and our internal healing through understandings about the brain and our bodies that have yet to be revealed by the scientific community. Bridging the gap between mysticism and science she revealed the purpose of this experience we call life. Kelly Schwegel has an undergraduate degree in Education, a master’s degree in Educational Administration, an educational specialist degree in Educational Leadership and has a new book “The Art of Inner Alchemy” recently published.

Siegmur Gerken PhD, ECP, HP then gave a presentation entitled

“Realising the unity of all existence and live with the will of your heart”. Posing the question, ‘How can personal development and the expansion of conscious perception change the state of our mind and actions in the world?’ Siegmur then went on to explain how many conscious and unconscious processes form our body, the way we feel, react, think, form our behaviour and develop our personality. This in turn influences our wellbeing, health and how we access and contribute to consciousness. Dr Gerken also introduced his research on the visibility of physical, emotional or mental energy patterns documented with infrared analysis and biophoton-measurements, which indicate that we embody our past and present experiences as images in our consciousness, showing that consciousness is not just a function of the brain, but of the whole body-mind field.

In addition to the main speakers there were also some shorter presentations from **Daniel Dick** who spoke about, ‘Consciousness and complementarity’, **Jan Rok**, a quantum physicist from CERN

who provided the latest research findings from quantum physics, **Dylan Rumley** who talked about ‘living in the flow’ and curing Alzheimer’s, **Mark Gober** who talked about his new book, “An End to Upside Down Thinking” – an eloquent argument that the idea that the brain creates consciousness is upside down - and **Campbell Young** who talked about “The positive effect of nitric oxide therapy on the cardiovascular system.” During breaks from the presentations **Andrew King** led some energising Tai Chi practices in the meditation garden.

It was a packed programme, but we enjoyed vegetarian lunches at the centre as well as some congenial evenings at local restaurants. The speakers did not underestimate the challenges facing the emergence of a new paradigm but it was encouraging to see so much work and activity across a number of disciplines and the growing sense of coherence in the field as a whole. We need to find more effective means of communicating our findings and spreading these new ideas.

Joe has worked as an international management consultant and as a professional writer as well as a life coach, hypnotherapist and Reiki energy healer. He works closely with eminent philosopher, scientist and writer Ervin Laszlo and he is currently the Managing Director of the ‘Laszlo Institute of New Paradigm Research’ (L-INPR) in Tuscany, Italy which brings together world experts in the fields of holistic and alternative health, consciousness, spirituality and sustainability.

Joe is the author of the best-selling life-coaching book ‘100 Tips for Total Life Fulfilment’ with more books to be published in 2019 including ‘The Path to Indra’ - a spiritual diary and ‘EarthPulse’ which analyses and attempts to solve the world’s most critical problems including climate change, pollution, poverty, corporate corruption, deforestation and human rights. He is Global President of Eternea (www.eternea.org) which is focused on research into Consciousness, Immortality and World Issues.

Joe is also the newly appointed UK Director of the “World Sustainability Development Forum” (WSDF-UK) which is focused on meeting the targets of the ‘Sustainable Development Goals’ (SDG’s) and the ‘Paris Agreement’ on climate change working closely with the IPCC (Intergovernmental Panel on Climate Change) and the United Nations. He regularly talks on these subjects at global conferences

Network News

ATTENTION MEMBERS

PERSONAL NUMBERS AND OFFICE PROCEDURES

Please help your administration office to run smoothly and so help you efficiently:

- when your details change (address, telephone number, email address etc.) please make sure we know
- use your membership number whenever you contact us, and write it onto all correspondence, conference booking slips, subscription forms and orders for books, services etc.
- book early for conferences - it helps you get a place
- ensure cheques are made out correctly to Scientific & Medical Network; for conferences and orders: always add (legibly!) details of what it's for and membership number on back, even when accompanied by a booking form
- remember we're a network, and it often takes time for all relevant people to be contacted so when making requests give us time to respond helpfully (and always remember to tell us who you are - we sometimes get forms back with no name at all!)
- help us save money; whenever possible pay in £ sterling and remember to gift aid when you make a payment (subscription, conference fees, etc..) - it maximises funds available for more important things.

Office hours are 10.00am to 5.00pm Monday- Thursday. Please leave a message if no one is available to take your call. We will get back to you as soon as we can.

UPDATE ON GALILEO COMMISSION

The summary and final reports have both been formatted - please see details in the enclosed leaflet where you can also order the printed summary version. Both reports are available as PDF downloads, and you will be able to order a printed copy of the full report online - we will post a link on the SMN and Galileo Commission websites - the latter has recently been redesigned. Harald Walach will be presenting at the Society for Scientific Exploration meeting in June, and also at the major Interlaken Science of Consciousness conference, where I will also be presenting a poster. Then we will report back to the annual meeting - flier enclosed. We are also hoping to receive further funding to develop the movement for an evidence-based post-materialist science of consciousness.

APPOINTMENT OF DIRECTORS, 2019

Nicholas Pilbrow writes: During the past year **Dr. Edi Bilimoria** was re-co-opted and welcomed back as a director having resigned during the previous year due to pressure of other responsibilities. In November 2018, **Dr. David Leech** was also co-opted as a director and he has also agreed to act as Treasurer to the Company.

Each year one third of the member appointed directors, who have served the longest, retire by rotation and all the co-opted members. They are, if they wish, eligible for re-election or co-option. The directors retiring by rotation are thus, **Mrs. Jacqueline Nielsen (2005)**, **Mr. Tuvi Orbach (2014)** and **Mr. David King (2016)** and those resigning as directors co-opted during the year **Dr. Edi Bilimoria** and **Dr. David Leech**. All those retiring are eligible for re-election or co-option and all have indicated their wish to continue. The remaining Directors are **Mr Paul Kieniewicz (2015)**, **Dr. Paul Filmore (2016 - Chairman)**, **Mr. Richard Irwin (2015)** and **Dr. Joan Walton (2017)**.

There are now up to eight possible vacancies for Directors to be elected at the Annual General Meeting and six current applications. There are four further vacancies available by co-option by the Board.

Members who wish to be considered for these vacancies are requested to apply by the end of May, 2019 by sending their C.V. and a short note on how they see themselves contributing to the aims of the Network. This will enable the Board to consider how they would match the tasks to be performed and, where appropriate, make recommendations to the members. If there are more applicants than vacancies, a vote will be taken at the Network AGM at the beginning of July. The members of the company will follow the recommendations of the Network AGM, unless there is good reason not to do so. Applications should be sent to The Secretary, Scientific and Medical Network, Colet House, 151 Talgarth Road, London W14 9DA.

WILLIAM BLOOM - YOUR SPIRITUAL HEALTH PROGRAMME

Members will be interested in a practical and experiential new programme that integrates spirituality and healthcare. *Your Spiritual Health Programme* was developed by the Spiritual Companions Trust and builds on their pioneering qualification, the Diploma in Practical Spirituality and Wellness (the first of its type on the government Ofqual register). Its main resource is a beautifully designed forty-page booklet filled with questionnaires. The participants fill these in so as to discern what kind of practices would work best for them and are then led through guided exercises to precipitate the health benefits. The approach is fully grounded in evidence and theory, much of it deriving from the substantial research on the health benefits of spirituality at Duke University's Centre for Spirituality, Theology and Health. An editable PDF of *Your Spiritual Health Programme* and supporting resources are freely available from www.yourspiritualhealth.org

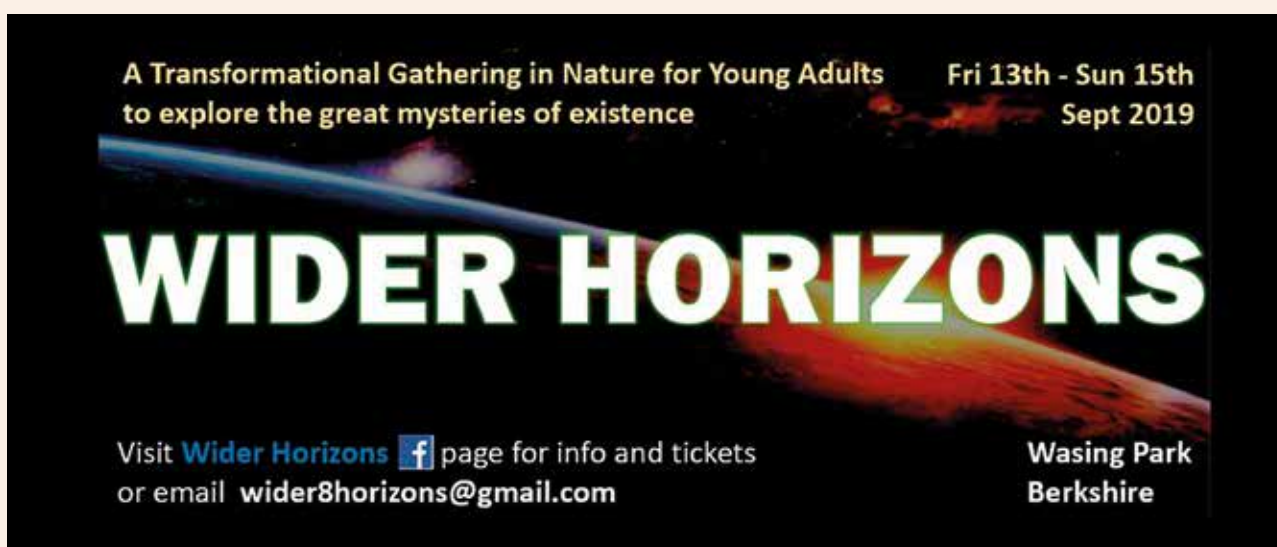
MEMBERS' NEWS

PROMOTIONS

For readers unfamiliar with this term, it was used by the founder George Blaker on the original card index to indicate that the member had died. Since the last issue, we have received notification of the promotions of **Professor Peter Stewart FREng**, **Hertha Larive** and **Dr Frank Parkinson**. Peter was chief of advanced projects at Rolls-Royce before his retirement, which he devoted to researching dowsing and imaging of subtle bodies among many other themes. His partner Hertha was a transpersonal psychologist who was involved in the Bristol Cancer Help Centre and very active in complementary medicine, lecturing on a wide range of topics. Both were closely involved in the Network special interest groups in subtle anatomy, science and spirituality, and science and esoteric knowledge - many of our meetings took place at Hertha's house in Oxford. Frank was a lecturer in linguistics who wrote a number of books on science and religion, and more recently a book of poetry. Just yesterday, I received an email from Isabel Clarke to say that **Professor Chris Clarke** (a former Chair) had died last week - we will print an appreciation in the next issue.

WIDER HORIZONS RETURNS!


Wider Horizons, a transformational gathering in nature for young adults, is being held again this year from Fri 13th to Sun 15th Sept 2019 at Wasing Park in Berkshire, in beautiful woodland surrounded by lakes. At this rite of passage event, young adults, including students, will have the opportunity to learn about and experience alternative views of the structure and nature of the mind and the world around, and there will be workshops in art, music, dance and healing. Wider Horizons was established in 1975 to deliver a course of instruction and discussions for students covering aspects of knowledge and experience that are not normally available to them. Wider Horizons has always been sponsored by the Scientific and Medical Network. If you would like to be involved or deliver a workshop, please contact Ben: wider8horizons@gmail.com Find out more here: www.facebook.com/wider8horizons If you have any friends or family with 18-21 year olds please share this with them.



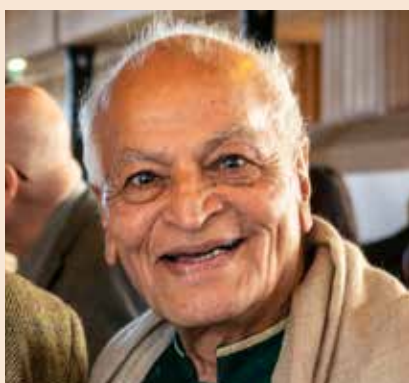
A Transformational Gathering in Nature for Young Adults
to explore the great mysteries of existence

Fri 13th - Sun 15th
Sept 2019

WIDER HORIZONS

Visit [Wider Horizons](#)  page for info and tickets
or email wider8horizons@gmail.com

Wasing Park
Berkshire



SATISH KUMAR SHORT FILMS

We have been working with Nat Dyer and Jason Taylor on a film project to produce 31 short films of Satish. The films were recorded in and around Hartland and present Satish's vision for how we can meet our planet's escalating environmental and political problems with hope and optimism. The theme for all of the films is Change the Story.

You can see all the films - on subjects from economics to Gaia Theory, science to Shakespeare, and energy to the importance of the food we eat - in the Change the Story folder on the Resurgence Vimeo page: <https://vimeo.com/album/5632402>

The films are also on Facebook: <https://www.facebook.com/Resurgencetrust> and Twitter https://twitter.com/Resurgence_mag

ELLEKE VAN KRAALINGEN – BORDE BLANQUE



Elleke, member for many years, writes:

Almost six years ago I moved with my husband Pieter Hiemstra and our youngest daughter, two horses and a hamster to La Borde Blanque, Midi-Pyrénées, France to realise our dream and life purpose: A Centre for Yoga, Meditation and Healing.

La Borde Blanque is an authentic French country farmhouse situated on the crest of a hill with a magnificent view over the surrounding countryside. It has a private lakeside beach on the beautiful Lac de Montbel, with clear and clean water to swim. The 12-acre estate in the foothills of the Pyrenees is

defined on one side by the natural boundary of the river Hers and on the others by the lake and the neighbouring forest. The property has a natural spring and bathes in the peace and serenity of the French countryside. Old pilgrim routes through the varied landscape offer numerous opportunities for hiking. All year round we offer various retreats and courses in which meditation and inner alignment with nature are central. **It is our wish that la Borde Blanque may be a place for connection and inner silence.** Members are welcome to apply to offer their own courses here or to attend our **Midsummer Meditation Retreat** to deepen your inner stillness in a magnificent environment! Costs: €825 includes 7 nights in a spacious double room (bathroom en suite), 3 delicious vegetarian meals per day and coffee and tea breaks & snacks.

Single room supplement is €150. We are looking forward to welcoming you!

www.bordeblanque.com info@bordeblanque.com

THE PHILOSOPHY AND SCIENCE OF CONSCIOUSNESS – DAVID AND JEAN INGMAN

Jean Ingman writes:

Quantum physics eliminates the idea of an objective reality. Does consciousness, the conscious observer, create the realities it perceives?

Two channeled works by David and Jean Ingman, published on Amazon.com, say yes!

■ **Reality and You – the Philosophy of Science and Consciousness.** 374 pp, p/b.

Aimed primarily at the physics and neuroscience community it covers such questions as:- How Consciousness forms the Reality we perceive, The Observer and the Observed are One, Free Will, Mind and Brain Interface, Entangled Minds, the Nature of the 'I' and much more.

■ **Conversations with Higher Consciousness.** 272 pp, p/b.

Provides contextual understanding which can ease the grief of the bereaved. Questions covered include:- 'Death' – What happens when we die? Love and Relationships after leaving the Physical Body, the Purpose of Life, Thoughts, Beliefs and Dreams and discusses the statements of many eminent scientists and philosophers.

These books provide extensively detailed explanations of the process by which conscious awareness, in consensus agreement, conceives, forms and experiences the 'quantum realities' it wishes to participate in. The communicators apparently exist in a quantum like domain.

Dictated in a teacher/pupil, question and answer, step by step, conversational style employing fully up to date analogies consistent with the latest scientific theories designed to enable the reader to reach the conclusion "This makes sense to me".

The relentless reason and logic employed display such coherent consistency that since the conception in 2016 of the website realityandyou.com, which has since been read in over 120 countries, the 'authors' have received much praise but no challenges regarding their depiction of the process by which consciousness forms its realities.



LONDON GROUP REPORT

LONDON GROUP
CLAUDIA NIELSEN
– 0207 431 1177,
claudia@pnielsen.uk

To read reports from other meetings, go to the REPORTS page of the London Group page of the Network's website. If you don't live in London but wish to be advised of London events, please drop me an email and I shall add your e-address to the circulation list.



■ JANUARY

The year started with a presentation by SHANTENA SABBADINI on the topic of *The I Ching, Synchronicity and Time*. Shantena is a theoretical physicist who worked in the US and Italy researching the foundations of quantum physics. He contributed to the first identification of a black hole. His interests took him to become scientific consultant to the ERANOS Foundation in the 1990s and there he was drawn to study Chinese classics, including the I Ching. He is the current director of the Pari Center for New Learning, and the author of various books including *The Original I Ching Oracle*, which he co-authored with Rudolf Ritsema and his latest, *Pilgrimages to Emptiness: Rethinking Reality through Quantum Physics*. Shantena started his talk by explaining what is meant by 'changes' in the title of I Ching, which translates in English [The Book of] Simple Changes. Life rises out of the interplay of chaos and order. The natural cycle is best understood as being made of unpredictable changes. The I Ching originates from shamanic practices



and indicates the dance between the two basic principles of Yin and Yang which are constantly moving. The Chinese cosmology is a superposition of various cycles and understands the cyclical nature of all phenomena. The principles of the I Ching as a divination tool relies on the understanding of reality by resonance, not by cause and effects which we in the West are used to.

Jung, who was very interested in the topic, developed the concept of acausal coincidences, to which he gave the name synchronicity. He refined the understanding of the concept through his discussions with Austrian physicist Wolfgang Pauli with whom he corresponded for 25 years. He posed two questions to Pauli: 1) is synchronicity a scientific principle that can be tested statistically? To which the answer was - no, it is not. Synchronicity does not depend on reduction of reality that allows it to be measured and compared. It is unique. And 2) does synchronicity have something to do with quantum observation? And here Pauli confirmed that there is a correspondence in the uniqueness of a synchronistic event and a quantum observation. So, the I Ching is a way of accessing synchronicity. The questions asked in the divination needs to be emotionally significant and should not involve a yes/no answer. If the question relates to a choice of alternatives, the question needs to be about the viability of one of the options, rather than describing the alternatives. It is also suggested that quite specific questions can be asked as they will be given detailed answers. The other important principle is that questioner needs to ask a question for himself, not for someone else. The answers will be understood by resonance. Whatever *feels* right to the questioner. This explains the nature of the language which in the original and in translations is obscure. The I Ching translation authored by Shantena and Rudolf Ritsema follows the principle of the original by providing each word that appears with a range of meanings accessible to Western minds. Working with the I Ching requires one to trust our own associations. There is no right or wrong.

■ FEBRUARY

This month we welcomed back DR MIKE KING an old friend of the SMN whose last presentation was in 2013. Mike is retired from the London Metropolitan University where he was a Reader, and is now an independent multi-disciplinary scholar in areas spanning religion, the arts, philosophy and science. He has published over 60 papers, book chapters, film and book reviews and is the author of 9 books which include 3 novels. He is a Quaker and a great lover of nature. This evening he talked about his environmental novel *Mountain Calls*, a semi-biographical account of his animistic encounters with a mountain in Austria. The experience which gave rise to this book happened in Austria some 10-15 years ago, when he was in Vienna during winter visiting relatives. He wanted to be in snow which was absent in the region so he jumped on a train and found himself on a mountain where he met a couple of people debating theology in a blizzard! They almost got lost! On his way back, in the beautiful sunset, Mike felt the mountain spoke to him. Not in words, but what he understood was the message WE ARE CONCERNED ABOUT WHAT YOUR KIND IS DOING. He was intrigued and the message stayed with him. He decided he needed to do something about it. He had another paranormal experience some months later, when he felt the presence of some 20 Native Americans spirit guides reminding him of his promise. The book is the fulfilment of the promise. Mike went

back three times to the Mountain, and although he did not get much on the first visit, because his attention was elsewhere, he made himself available in the following two. He felt the Mountain used him as the eyes and the ears of humanity. He also felt he and Mountain became less anxious as they got to know each other better.

The novel is structured as periods in the Mountain and in the debates in the Viennese coffee shops, where future scenarios are discussed. The novel leads to the idea of recapitulationism, which Mike sees as a spirituality for the Anthropocene. Recapitulationism is not a new idea, it goes back to our shamanic past, though Pythagoras then through the New Platonist tradition, Pico della Mirandola, flowing into the work of Leibniz, in his monadology. To recapitulate means to encompass everything that exists inside us. The principles of Recapitulationism which Mike identifies are:

1. Each human recapitulates the universe within him/her. This is well known in the mystics of all traditions. Everything is ultimately one.
2. A human can know this fully or not at all. This is connected with spiritual development. The person is either open to it or is not.
3. Each human recapitulates the universe both truly and uniquely. This is where Mike sees the contribution of the West by endorsing individuality, which Eastern philosophies do not. Each individual recapitulates the universe fully and truly, in his/her particular way.
4. Non-human persons cannot recapitulate either knowingly or fully. Mike calls non-human persons all other beings belonging to the animal kingdom. They are not lesser beings but cannot knowingly recapitulate. Only in humans can we say that *ontogeny recapitulates phylogeny*.

Recapitulation can be achieved through various routes: memory, Darwinian inheritance, Lamarckian inheritance, culture, past lives, collective unconscious, morphic resonance, Plat's ideas, Leibniz monadology, Shamanism, and the Akashic Records.

The future Mike says, should not be seen as frightening because nothing is ever lost.

■ MARCH



PAUL MARSHALL was our speaker this month. Paul studied physical sciences and holds a PhD in Religious Studies. He has a deep interest in mystical experiences of the natural world and the philosophy of consciousness. This evening he talked about his new book, *The Shape of the Soul*. Paul had a profound mystical experience in his sleep many years ago, from which he woke up feeling a sense of wholeness, different from anything he had experienced in his life. In his dream he was by a seashore looking at the horizon, and was pulled into a profoundly meaningful expanded consciousness, which led him to a deep sense of having found what he was looking for. His thought was - no more searching. He understood everything, he knew everything. Worries dropped away and so did his ego self. In this expanded state he became aware of other living things which had a circular shape, from which the title of his book arises. He was totally clear-minded, aware of the unbearable intensity of the love he felt.

Paul took us through his book chapter by chapter. The first chapter introduces the concept of non-duality and explains mystical experiences: their potential triggers, characteristics, types and classification. As a definition, he proposes that mystical experiences bring a sense of deepened contact with reality, the contact consisting of unity or at least intimate connection or presence, and often an intuitive type of knowing. Chapter 2 describes his own experience and chapter 3 Into the House of Death exploring Near Death Experiences and observing that mystical experiences have an affinity with NDEs. There is a sense of coming back *from* real life, a threat to the ego, and experiencing self-judgment (as opposed to judgment from some other source). In chapter 4, Paul explores the higher dimensions of the Self, explaining the two aspects, the ego self and the Cosmic Self, which he speculates, may be a communal Self. In chapter 5 he takes a look at other types of consciousness, such as angels and spirits and explores the experiences of Hildegard of Bingen. In chapter 6 he refers to a theory of the nature of reality based on the idea of primacy of consciousness and develops Leibniz (1646 – 1716)'s philosophy of monadology. Monads according to Leibniz, are fundamental units of the universe, each expressing the universe from their own point of view. They are complete in themselves, including all of its relations to every other monad in the universe. Monads are 'laden' with the past and 'pregnant' with the future. The soul is an advanced monad. The last 5 chapters develop monadology further and include slight modification of the system to make it more consistent with modern understanding. He develops the idea of evolutionary monadology incorporating theories and principles not available in the 17th century, and includes a discussion on the existence of evil. The last chapter explores The Making of God.

■ APRIL

On a cold Spring evening, JEREMY NAYDLER gave one of the most interesting lectures – in my view – we had at the London Group. Jeremy holds a PhD in Theology and Religious Studies. He has written several books on religious life and antiquity and on the history of consciousness. He entitled the talk *The Computer and the Psyche* and the subject was part of his new book *In the Shadow of the Machine: The Prehistory of the Computer and the Evolution of Consciousness* (Temple Lodge 2018). Computers have become intrinsic in our lives. At the most fundamental level, these machines work on the binary system of electrical on/off signals in a transistor. Binary logic is pervasive in our culture but where does this logic come from? Jeremy's research uncovered the myth of Binarius developed in the late 16th century by the alchemist Gerhard Dorn. On order to give us the context, Jeremy

took us back to much earlier times. He explained that ancient Egyptians lived in an animated world of gods and goddesses. A tree was the abode of the goddess Knut and therefore sacred. And so were all elements in nature, sacred dwellings of gods and goddesses. He told us that Egyptian priesthood, wishing to protect their holistic culture, resisted the introduction of machines, which are based on logical thinking, even though contemporary Mesopotamian culture made wide use of them. It is in Greek culture that we see binary logic first staking its place in philosophy. Aristotle formalised it in various laws, for example, 'a thing is what it is and not anything other than what it is'. This was his most fundamental law and was backed by other binary laws. Aristotle was nevertheless aware of a further, deeper level of thinking beyond the binary, a middle place, the moral level. That is where virtue lives. For example, generosity is not the opposite of meanness, generosity is a middle, moral value. It lives somewhere on the spectrum between the opposites of meanness and profligacy.

From a different perspective, the binary theme is the model offered by Pythagoras. He introduced the idea of Creation as the Source represented by the number 1. Multiplicity arises from Creation and is represented by the number 2. The world of opposites was thus created and from this much conflict and strife arises. And with it the concept of *evil*. Moving into the Middles Ages, Jeremy used the Fall from Paradise as example. The snake represents duality and carries the connotations of evil. We now come to Dorn who developed the myth of Binarius, the core of his presentation. In the Bible it is stated that God determined that his creation was "good" on every day, except on the second day. That day God separated the waters into upper and lower levels. Binarius is born. According to Dorn, God is the point (Unarius). It has no dimension and is prior to all. From the point comes multiplicity represented by the line (Binarius) which creates a circle (Ternarius). On this circle revolves the human soul – which (for Dorn) is the pinnacle of creation. But Binarius is not content, wanting to create his own world bends itself (the line) around and develops two heads. He is full of envy. Binary thinking seeks its own popularity.

Leibniz takes binary thinking further and tries to develop a thinking machine based on binary logic. This becomes reality when electricity is introduced in the 20th century and then culminates in the computer. Binary thinking is attractive but traps us into simple (simplistic?) thinking. Jeremy argues we need to avoid this trap and encourages us to connect with nature, where real knowledge resides and through which we find our way to freedom, the excluded middle, the voice of consciousness. A particularly relevant subject in these febrile, Brexit contaminated days!

NOTICE

The Helene Reeder Memorial Fund for Research into Life after Death

The Helene Reeder Memorial Fund is pleased to announce the availability of grants for small and medium sized scientific research projects concerning the question of Life after Death. Grants will be awarded in the range of EUR 500 – 5,000 maximum.

The topic Research into Life after Death should constitute the main objective of the project. Applications in English to be submitted by e-mail to the HRF, Edgar Müller, adtempus@comhem.se and adtempus1@outlook.com should include:

- detailed description of the project, including the objectives of the project, methodology, cost budget, timetable, plans to publish the results in some scientific journals, CV of the applicant, how the applicant plans to report back to the HRF about progress and result, any other financing than from HRF.

The target date of receiving applications is October 1 2019. It is the intention of the HRF to evaluate the applications and to make decision regarding the grants before the end of the year.

MEMBERS' ARTICLES AND ARTICLES OF INTEREST

Available through links or from dl@scimednet.org

SCIENCE/PHILOSOPHY OF SCIENCE

Lucie Laplane et al

- *Why Science Needs Philosophy* (5 pp, from PNAS, March 5 2019)

Jose Dies Faixat

- *Beyond Darwin – the Hidden Rhythm of Evolution* (71 pp.)

Edge Science

- *On Meaning, with an article by Andrew Lobrey on the Information Virus* (20 pp. in all)

Rollin McCraty,

- *Science of the Heart HeartMath* (119 pp.)

Alan Rayner

- *Natural Inclusional Streams* (25 pp.)

Julia Mossbridge

- *Designing Transcendence Technology* (27 pp)

Dejan Rakovic

- *On Extended Quantum-Holographic Framework for Control of Macro-Quantum Correlations of Individual and Collective Consciousness* (6 pp. from 14th Symposium on Neural Network Applications in Electrical Engineering)

Adamantia F Fragopolou et al

- *Hippocampal lipidome and transcriptome profile alterations triggered by acute exposure of mice to GSM 1800 MHz mobile phone radiation: An exploratory study* (18 pp, from *Brain and Behaviour* 2018)

Dimitris K Panogopoulos

- *Comparing DNA damage induced by mobile telephony and other types of man-made electromagnetic fields* (10 pp. from *Mutation Research-Reviews in Mutation Research* 781, 2019, 53-62)

CONSCIOUSNESS STUDIES

AK Mukhopadhyay

- *Zero Point Energy State of the Brain* (5 pp., from *Archives in Neurology and Neuroscience*)

Peter Fenwick et al

- *Neural Correlates of Induced Light Experience during Meditation: A Pilot Hyperscanning Study* (11 pp. from *Neuro Quantology*, Jan 19)

Our Eternity is Material

- *Jean Bitar* (97 pp.)

Patrice Solomon

- *Expanding Scientific Methodology to Study Consciousness?* (9 pp.)

Oliver Robinson, Frenchman's Cove 2019 PPTs

- *Dialectical Thinking, History of Science, Sacred Geometry, Solar System*

W Dewi Rees (late SMN)

- *The Hallucinations of Widowhood* (4 pp., BMJ 1971)

Of special interest as the pioneering study of what are now called after death communications (ADCs)

SPIRITUALITY

Anne Baring

- *The Shekinah, The Black Madonna and Mary Magdalene* (7 pp.)

Commission on Religious Education

- *Religions and Worldviews – the Way Forward* (108 pp)

Of special interest with its formulation in terms of worldviews including spiritual traditions but also secular formulations.

John Cornwell

- *The New Theism* (5 pp. from *The Tablet – review of It Keeps Me Seeking*)

GENERAL

Deva-Mari Beck, Barbara Dossey, William Rosa

- *Florence Nightingale and the U.N.'s 17 Sustainable Development Goals: Her Keen Relevance for Our Times* (6 pp.)

ONLINE ARTICLES FROM ANTHONY JUDGE

- *Multi-option Technical Facilitation of Public Debate*

Eliciting consensus nationally and internationally

<https://www.laetusinpraesens.org/docs10s/pubdeb.php>

- *Local Reality of Overcrowding -- Global Unreality of Overpopulation*

Comprehensible reframing of engagement with global issues via metaphors of proximity

<https://www.laetusinpraesens.org/docs10s/proxemic.php>

- *Exploring Representation of the Tao in 3D*

Virtual reality clues to reconciling radical differences, global and otherwise?

<https://www.laetusinpraesens.org/docs10s/juggling.php>

- *Comprehension of Unity as a Paradoxical Dynamic*

Metaphors reframing problematic engagement with otherness

<https://www.laetusinpraesens.org/docs10s/ringtri.php>

book reviews

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SCIENCE-PHILOSOPHY OF SCIENCE

MULTIPLE SITUATED RATIONALITIES

David Lorimer

■ THE TERRITORIES OF HUMAN REASON

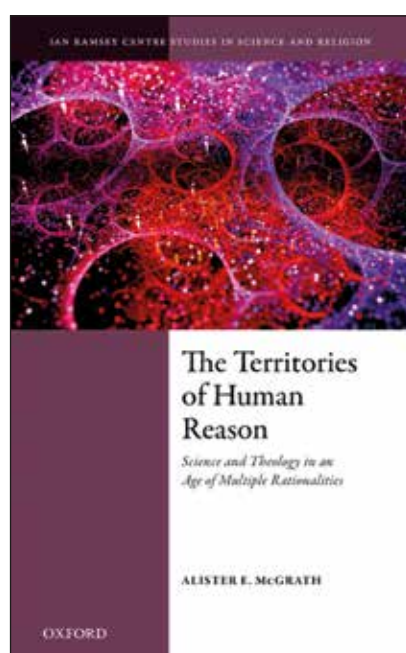
Alister McGrath

Oxford, 2018, 288 pp., £25, h/b – ISBN 978-0-19-88310-1

Alister McGrath is Professor of Science and Religion at Oxford and an important voice in the science and religion field, with a background in both molecular biophysics and Christian theology. An indication of the distance travelled over the last 40 years can be gleaned from critiques of Sir JG Frazer with his monumental *The Golden Bough* dating from 1890 depicting religion as a primitive form of science and cosmology 'offering explanations of the world which are refuted by modern science' and which compete for the same conceptual space (p. 12). Frazer was also writing at

a time when the conflict thesis had been strongly put forward by JW Draper and AD White. This position is still maintained by contemporary new atheists while anthropology and sociology of science have moved on considerably. It is no longer permissible to use epithets such as primitive and savage that were common a hundred years ago and that presupposed the absolute superiority of the Western scientific worldview. Nor is it tenable to insist on a single universal rationality based on Enlightenment thinking. As McGrath points out, there has been an evolution towards 'a plurality of cultural and domain-specific methodologies and rationalities (p. 2) resulting in a radical epistemological pluralism. Later he refers to intellectual colonisation and the need for epistemological decolonisation, a controversial process already underway in universities.

The limits of science in relation to values and meaning were already noted by John Dewey. Science and religion constitute culturally and socially constructed 'organising myths' that shape our interpretation of the world. Debate takes place within respective epistemic communities, while the ontological unity of nature does not necessitate a single valid research method. The first part of the book explores these multiple rationalities, also across disciplinary boundaries and considering social aspects embodied in epistemic communities. Given that we are physically embodied as well as culturally embedded, we need to recognise that our cognition also has a psychological and affective component, so that what we consider reasonable falls within the context of the metanarrative we accept. McGrath is well aware of the danger of uncritically accepted presuppositions and argues that enlightenment rationality has been transmuted from the category of culturally contingent to intellectually necessary, an illegitimate epistemological or rather ideological move. Interestingly, he points out that Newton did not use



a single rational methodology in his scientific and theological studies, but rather a series of different working assumptions.

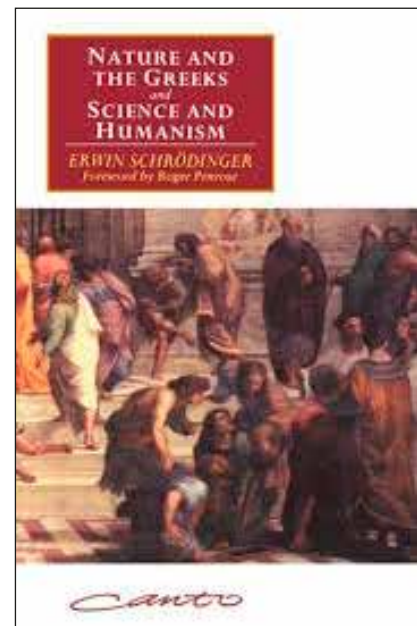
There is a very good section on the background of scientism, pointing out that it makes second-order philosophical claims about science and also drawing on the arguments of Mary Midgley and Roy Bhaskar. McGrath argues that science and theology are distinct perspectives on and levels of reality. He then goes on to contend that the 'given' for science is the world of nature, and 'in the case of theological science, it is God's self-revelation in Christ.' (p. 68) It seems to me that the status of the term 'given' is very different in these two cases - obvious in terms of nature, but in terms of 'the narrative of Jesus Christ' the basis in the Gospels is already a cultural and theological construction. McGrath says as much himself (p. 99) that Christianity is an interpretation of the identity and significance of Jesus of Nazareth, set out in the New Testament, later adding that 'Christian theology is an extended reflection on essentially empirical data' (p. 208) - again, the sense of empirical is much wider in the theological context. However, it is true to say that there is an implicit metaphysic both within empirical science and Christian theology. Prior commitments will play a decisive role in acceptance of these positions.

A wider issue is the sense-making capacity of religion in general and Christianity in particular. McGrath quotes criteria put forward by William Wainwright for good metaphysical theories: they must be logically consistent, coherent and simple. From this angle, Christianity is a way of seeing things, a metanarrative, as also maintained by Tolkien and CS Lewis in discussing rational explanation in science and religion. McGrath considers the meaning of explanation and the role of causality and unification in this respect, distinguishing between ontic and epistemic levels. This leads on to a discussion of religious explanation looking at the Christian vision of reality as a whole. Here McGrath quotes Keith Yandell: 'a religion is a conceptual system that provides an interpretation of the world and the place of human beings in it, bases an account of how life should be lived given that interpretation, and expresses this interpretation and lifestyle in a set of rituals, institutions and practices.' (p. 138) From this point of view, sense-making is the key criterion, but this is necessarily subjective and one can see the circularity in Quine's argument that the only valid test of a belief is

whether our experience fits into an overall interconnected web of beliefs. Lewis is very explicit in this respect when he says that he sees everything through a Christian lens. McGrath goes on to point out that such self-evidencing and self-referential explanations are also found in cosmology.

The last two chapters discuss the limits of rationality in science and religion in the light of complexity and mystery, and the notion of rational consilience. McGrath formulates his approach to mystery in terms of the limits of the human mind, including in science the notion of dark matter but also criticising the 'exclusive sufficiency' and promissory materialism of scientism with its contention that everything will ultimately be explained in these terms. Drawing on Gabriel Marcel, McGrath proposes that mystery is 'something we cannot view objectively, precisely because we cannot separate ourselves from it' (p. 192) - hence Marcel's remark that life is not a problem to be solved but a mystery to be lived. For me, this is most succinctly expressed in the work of Meister Eckhart.

EO Wilson's notion of consilience is well known as an attempt to unify knowledge within a single framework, but this privileges the Enlightenment view generally and science in particular - a form of intellectual colonisation and hegemony already questioned earlier in the book but recently affirmed in a new book by Steven Pinker. McGrath proposes instead 'webs of disciplinary interconnection and cross-fertilisation' thus avoiding privileging specific disciplines and approaches. Here he uses Whewell's term 'colligation' in constructing a big picture 'capable of accommodating and interconnecting multiple notions of insights, drawn from across intellectual disciplines, distinguished by their operative rationalities' (p. 211). This seems a much more hospitable and less imperialistic approach that can respect a plurality of perspectives, reminding one of systems theory - not in fact mentioned here. This suggests the need for wisdom beyond knowledge and an appreciation of 'coherence-making and meaning-generating properties' eliciting complementarity. Overall, the book is a rigorous delineation of the territories of human reason and a useful discussion of multiple nationalities in scientific and theological terms - even if not all readers will be able to accept McGrath's theological arguments.



INHERITED STRUCTURES

David Lorimer

■ NATURE AND THE GREEKS, SCIENCE AND HUMANISM

Erwin Schrödinger – foreword by Sir Roger Penrose (Hon SMN)

Cambridge, 1996, 172pp., £12.99, p/b – ISBN 978-1-107-43183-6

This is a book I have been meaning to read for a long time, like *Physics and Philosophy* by Sir James Jeans - especially having enjoyed Schrödinger's earlier essays on life, mind and matter. As one might expect, the first essay relates physics to its origins in Greek thought, with individual coverage of key thinkers such as Pythagoras, Parmenides, Xenophanes and Democritus as it traces the evolution of patterns of thought. In its broadest context, Schrödinger sees science as part of our quest to understand who we are, but he recognises the validity of different approaches reflected in the heart and pure reason. For him, religion rounds out one's worldview even if there is a danger of closure, but this is also present in science. He draws on Greek scholars such as Gomperz and Burnet, quoting the former as saying that a thorough knowledge of the origins of our entire intellectual education 'is the indispensable prerequisite for *freeing* ourselves from their overwhelming influence' (p. 19), noting that this includes our entire thinking, logical categories and linguistic patterns. Burnet makes the same point when he describes science as 'thinking about the world in the Greek way.'

There follows a chapter on the competition between reason and the senses as also reflected in the distinction between primary and secondary qualities. It was Pythagoras who defined things in terms of numbers, an approach also embodied in Galileo. There is an elegant description of how Pythagoras arrived at his theorem and how the Greeks deduced the circularity of the Earth, defined it as a planet, and, in 280 BC, Aristarchus established a heliocentric system overthrown 150 years later by the authority of Hipparchus in his capacity as 'President of the University of Alexandria'. The chapter on the Ionian Enlightenment identifies two key features that have come down from the Greeks to modern science: the assumption that the world can be understood, 'and the simplifying provisional device of excluding the person of the understander from the rational world picture that is to be constructed' (p. 54). Early attempts to understand the world did so in terms of various substances, although later in the book Schrödinger argues for the primacy of form over substance. Anaximenes is the first to recognise the processes of rarefaction and condensation, which Schrödinger sees as a stepping stone to atomism, itself an antecedent of quantum physics.

Moving onto the exclusion of the observer, Schrödinger points out that this helps simplify the scientist's problem of understanding nature 'by disregarding or cutting out of the picture to be constructed, himself, his own personality... the thinker steps back into the role of an external observer'. Moreover, and this still applies, 'I am not aware of cutting out my mind when I construct the real world around me.' This necessarily results in an impoverished view of the world giving lots of factual information but being 'ghastly silent about all and sundry that is really near to our heart, that really matters to us.... it knows nothing of beautiful and ugly, good or bad, God and eternity' (p. 95). We do not belong to this material world constructed by science, we are spectators even if our bodies do belong to it. Schrödinger then points out that 'in particular, and most importantly, this is the reason why the scientific worldview contains of itself no ethical values, no aesthetic values, not a word about our own ultimate scope or destination, and no God, if you please. Whence came I, whither go I?' The world picture only contains primary qualities, not consciousness and sense.

Schrödinger returns to this theme towards the end of the second essay in a discussion of physical indeterminacy and free will, drawing on the thinking

of Ernst Cassirer. Incidentally, the Templeton Foundation has just awarded a grant of more than \$5 million to investigate the neuroscience of free will. For Schrödinger, this would be a category error since 'where is the room for the moral law if the natural law overpowers and entirely frustrates it?' (p. 80) Free will is a higher order act that cannot be reduced to the mechanics or biochemistry of neural mechanisms. Cassirer maintains that free will includes as its most relevant part our ethical behaviour since our actions are determined by a variety of motives - physical randomness is simply not an adequate basis (see my review of *Science and the Good* in this issue). However, we can be tempted to explain things in terms of a backward-looking determinism after the event, as Bergson observes. This does not mean that they were determined *a priori*.

I would like to highlight one further point, passing over his fascinating discussion of the tension between the discrete and the continuous. After quoting some guidelines from a Commission for University Reform in Germany to the effect that each lecturer should be able to convey the limits of his subject matter, Schrödinger points out that even by the time he gave his second lecture nearly 70 years ago, our conceptions of matter had turned out to be much less materialistic than in the 19th century. He asks how we are to picture matter in our mind, commenting that matter is in fact an image in our mind and hence mind is prior to matter in terms of the general attitude we have to adopt in order to synthesise the findings of modern physics. However, we are still steeped in the kind of materialism that is based on these 19th century ideas. Schrödinger comments that it would take 50 years or so before the educated general public would have become aware of such a change, but it has still not really come about, not because of physics, but rather on account of the prevalence of mechanistic biology, notwithstanding the development of systems theory. He emphasises that the process of assimilation of new ideas is not automatic, '*we have to labour for it.*' This is exactly what we are trying to do with the Galileo Commission Report in terms of a new

science of consciousness. I am sure Schrödinger would have supported the initiative, and I recommend especially readers interested in the history of ideas to read this classic book.

HARMONISING SCIENCE AND SPIRITUALITY

David Lorimer

THE UNIVERSE IN A SINGLE ATOM

HH The Dalai Lama

Abacus, 2006, 229 pp., £9.99, p/b
ISBN 978-0-349-11376-2

Although this book was written some years ago, it has lost none of its relevance in relation to the subject matter, even though some areas like contemplative to neuroscience have made considerable progress in the interim. The book begins by explaining the Dalai Lama's initial encounter with science via some artefacts, including a telescope, left by his predecessor, along with two film projectors and three cars. This is against a background of extensive training including memorising sacred texts, and long hours of prayer and meditative contemplation. His main initiative has been dialogues with scientists through his Mind and Life Institute for over 20 years. This book shows him as well-informed in terms of cosmology, physics, biology and neuroscience interfacing with Buddhist philosophy and ethics.

It is interesting to read of some of the formative influences on his thinking, including in physics Carl von Weizsacker and David Bohm, and Sir Karl Popper in terms of his views on Darwinism as a metaphysical research programme and his division of the world into three main categories, with matter, mind and abstract composites or mental formations. In addition, he gleaned from Popper some interesting insights into falsifiability

compared with the Buddhist principle of the scope of negation. He notes that while science deals with empirical facts but not with metaphysics and ethics, Buddhism requires critical enquiry into all three areas. He found in Bohm 'one of the greatest intellects and most open minds' he had encountered.

In various places in the book, the Dalai Lama makes particularly clear



statements about the limits of science and the dangers of scientism. He observes that 'scientific materialism seems to be a common unexamined presupposition... My concern here is not so much to argue against this reductionist position (although I myself do not share it) but to draw attention to a vitally important point: that these ideas do not constitute scientific knowledge; rather they represent a philosophical, in fact a metaphysical, position.' (p. 12) This is exactly the argument of our recent Galileo Report. He notes that one of the principal problems of scientific materialism is its narrowness of vision from a human perspective, as it can impoverish the way in which we see ourselves. Later, he rightly notes that 'the view that all mental processes are necessarily physical processes is a metaphysical assumption, not a scientific fact' (p. 137). He feels it critical to recognise the limits of science and to integrate within the totality of human knowledge, including metaphysics and ethics. Specifically, he recommends that science should be practised with compassion and empathy.

Needless to say, his expositions of Buddhist philosophy are most instructive and in relation to both spirituality and science he emphasises the importance of refined attention, advocating some contemplative training also neuroscientists. He does not think that neuroscience has any real explanation of consciousness, and uses the Buddhist notion of a substantial cause to argue that although 'consciousness and matter can and do contribute towards the origination of each other, one can never become a substantial cause of the other' (p. 141) as this would constitute a category error. He feels that a paradigm shift is required in order to integrate the third person perspective with an informed first-person perspective - both approaches and methods are required through a disciplined and trained mind. Moreover, for the Dalai Lama it is not sufficient to understand the nature of consciousness without addressing the question of suffering and how to alleviate it. The next chapter explains some possible ways forward in this respect, drawing on both science and contemplative practice. He feels it crucial to develop a rigorous methodology of first-person empiricism.

In discussing the experience of the clear light state as one potential research avenue, he remarks that his own teacher Ling Rinpoche remained in the clear light of death for 13 days: 'although he was clinically dead and had stopped breathing, he stayed in the meditation posture and his body

showed no sign of composition.' (p. 166) As the Dalai Lama observes, it would indeed be interesting to know what is happening at the physiological level in such a case.

Although the last chapter is devoted to a discussion of ethics and the new genetics, the issues are wider than a single field as they concern 'the relationship between our knowledge and power on the one hand and our responsibility on the other' (p. 198). The latter must advance in tandem with the former. He calls for more education on the relationship between science and society and a much higher level of public involvement in debate, especially in relation to new ethical issues raised by scientific advances. This requires a broadly human approach rather than seeking nationalist advantage. Individually, this means checking our own motivation to ensure that it is founded on compassion, taking the widest possible perspective, seeking to be self-aware and unbiased, and responding in the spirit of humility. All this should have as its primary goal the well-being humanity as a whole. The measured tone, deep reflection and well-informed account of both science and Buddhist philosophy make this a classic statement and a timely reminder to integrate the ethical dimension.

THE NEW ENLIGHTENMENT

David Lorimer

■ SCIENCE AND ENLIGHTENMENT—TWO GREAT PROBLEMS OF LEARNING

Nicholas Maxwell

Springer, 2019, 108 pp., €52.74, p/b (eBook €41.64) – ISBN 978-3-030-13419-8

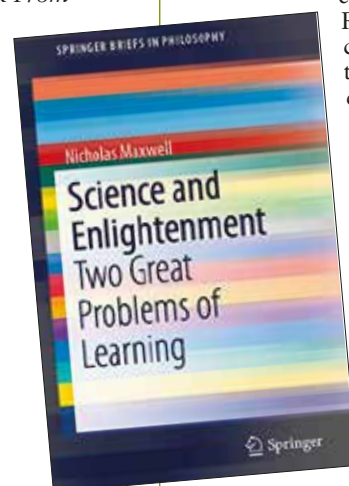
Nicholas Maxwell's book *From Knowledge to Wisdom* was first published in 1984, 35 years ago, and he has continued to propagate its basic argument with respect to science, rationality and the humanities ever since. In this short but densely argued work in nine chapters, he systematically sets out his core arguments and the reasons why it is important to shift our university system from knowledge-inquiry to wisdom-inquiry, as he also elaborates in his

article above. His argument is very different from that of Steven Pinker set out in his book *Enlightenment Now: the Case for Reason, Science, Humanism and Progress* based on unreconstructed and unself-aware philosophical foundations with a conventional rhetorical use of the terms reason and science as if these can only be attributed to the position characterised by scientism.

The need for a New Enlightenment stems from the failure of the 18th-century formulation not in terms of the scientific method (although Nicholas is highly critical of what he calls standard empiricism), but rather in the second great problem of learning, how to make progress towards a more civilised world. The great blunder for Nicholas is that the *philosophes* and indeed the current university system is trying to make progress in knowledge about the social world rather than improving the social world itself, which would come about if universities pursued wisdom-inquiry instead. Given that science has enormously increased the power and scope of our action on the natural world in terms of population growth, environmental degradation, species extinction, the lethal character of modern war, pollution and climate instability, this has created a new crisis of knowledge without wisdom on an unprecedented scale. This is not to criticise science as such, but rather to point out that its technological capacity has put a great deal more power into our hands and has created what the historian Toynbee and others have called a morality or wisdom gap - as Schumacher observed, humanity is now too clever to live without wisdom.

An important part of the argument is the one-sidedness of the Enlightenment project in attending to logic and evidence while disregarding feelings and values. Nicholas

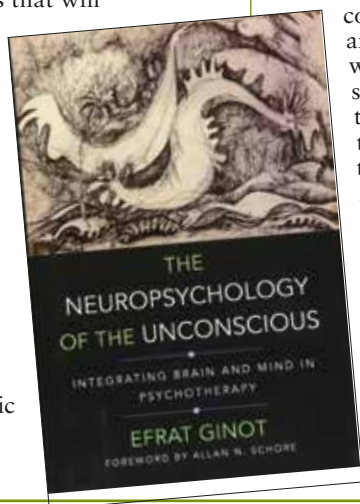
explains how the Romantic opposition compensated for this exclusion and created a counter-enlightenment and a need for 'a kind of organised enquiry rationally devoted to the growth of wisdom'. He explains the basis of his approach in terms of Aim-Oriented Empiricism with its hierarchy of metaphysical assumptions and his related



and equally rigorous Aim-Oriented Rationality that can be applied to making progress towards a more civilised world. In this respect, he encourages universities to hold regular interdisciplinary seminars to address human and planetary challenges in cooperatively rational ways. These are fundamentally problems of living rather than problems of knowledge (p. 44) and include better ways of solving conflicts.

The message is both urgent and timely as we witness continuing war, inequality, injustice and avoidable suffering based on competing factions and nationalities, and we face the prospect of further resource wars with burgeoning populations and climate-related shortages unless we move towards a vision of interdependence and interconnectedness prioritising the planet over nation states. Nicholas spells out the revolutionary changes required to academic enquiry so as to promote cooperative rationality and social wisdom, which includes the proper vocation of philosophy. He analyses 26 points of disagreement between knowledge-inquiry and wisdom-inquiry so that academic education becomes more about learning how to live and realising what is of value. He then reflects on the current domination of knowledge-inquiry in universities, while noting some positive developments, including his own University College London in initiating the Global Challenges Programme. He explains how wisdom-inquiry could help put into practice with very considerable global implications (p. 91), and responds coherently to objections levelled against his approach.

There is no doubt about the importance of the case Nicholas makes as we struggle to create a more civilised world through a more integrated approach to world challenges. Implementation of his proposals requires a radical shift in attitude and a corresponding re-prioritisation of our educational and political systems that will only come about through further raising of awareness and corresponding campaigns. It is therefore all the more regrettable that his publishers have priced the book out of the range of the ordinary reader, even in electronic form.



MEDICINE-HEALTH

WE MAY BE OUR OWN WORST ENEMIES

Gunnel Minett

■ THE NEUROPSYCHOLOGY OF THE UNCONSCIOUS - INTEGRATING BRAIN AND MIND IN PSYCHOTHERAPY

Efrat Ginot (foreword by Allan N. Schore),

W.W. Norton & Company,
New York, London, 2015,
336 pp., £25, h/b -
ISBN 978-0-393-70901-8

To understand why a person may suffer from psychological problems, why they occur and what can be done about it is the essence of all forms of psychotherapy. For this to happen it is necessary to understand how the brain and mind work. Before Freud introduced his mapping of the mind we had little understanding about what causes some people to suffer from mental, internal struggles that sometimes take over and ruin their lives for no obvious reason. Since then psychology and psychotherapy has been through a journey trying to understand the causes of psychological problems and how to best treat them. We now know that many of our adult problems begin in childhood. But we are still not clear exactly how and why. To begin with, the focus was more on the conscious than the unconscious mind. The latter was dismissed as 'basement storage' for unwanted thoughts, emotions and behaviour, that needed to be cleared out.

With today's advances in neuropsychology we are now getting a more nuanced picture of the role the unconscious plays throughout our lives. As a consequence, psychotherapists are beginning to be able to work with their clients in more sophisticated ways to help them understand and confront the reactions and control of the unconscious, and thereby minimise the negative and/or unwanted influence, which is causing their psychological problems.

In this book Efrat Ginot explains how the unconscious is an essential and valuable part of our brain that helps us towards a form of mental

homeostasis - for instance, by reacting in certain ways, such as detecting patterns in the environment and reacting with a tendency to favour repetition. Such reactions go a long way back in our evolutionary history. They enable the brain to create 'building blocks' that help us deal with each new situation. This helps us find the best possible solution and strategy in situations where we otherwise could suffer irreparable damage, i.e. when we're exposed to life-threatening situations, or suffering from mental or emotional 'overload'.

Because of the importance of our brain power (as a species) it is important that we are able to maintain a certain level of positivity as a driving force in life. (A newborn baby that is not getting enough attention from the environment even runs the risk of dying from the neglect.) So just like the signalling from the body's systems for maintaining physiological homeostasis (or inner balance), such as hunger, sweating, shivering, etc., we have a similar system for maintaining a mental state of homeostasis. This can consist of strategies (often developed very early in life) to adjust to the environment, which is absolutely vital for the child to develop into a fully functioning adult. This can be learning early on to be pleasing to a demanding parent, to 'shut down system' to prevent bad experiences from entering into awareness or to develop habits aimed finding the best solution for us in a particular situation.

The problems with these unconscious strategies to help us through life is that they may become rigid and difficult to change or get rid of when we no longer need or want them. This is where psychotherapy comes in. To help to change what was once a useful strategy for a certain period of our lives, but which in present time may be causing psychological problems and preventing us from having a positive experience of life. Ginot writes: *"The process of developing unconscious and automatic defensive systems is closely intertwined with implicit and explicit learning processes. Learning occurs when specific behaviours, emotional reactions, comforting thoughts, or soothing internal or external responses, from simple avoidance to complex cognitive machinations such as the tendency toward grandiose self-soothing, take hold in the face of an immense blow to the self. Learning is also crucial when a very negative and faulty self-evaluation develops; a child has no choice but to internalise as his own impatience, criticism, neglect, or lack of acceptance. These*

communications become the dominant measure of his self-worth.” (p150)

It can be a big challenge for a psychotherapist to deal with the unconscious since it may involve and trigger unconscious patterns in both client and therapist. In her book Ginot highlights some of these difficulties, such as the lasting power of anxiety, therapeutic enactment, aspects of affective dysregulation, repetition and resistance and intergenerational enactment of trauma. In her words: “*Unconscious processes are vast and ever-present, and they are characterised by learned and reinforced neuropsychological patterns that essentially form the foundation for our conscious existence.*” (p. 229)

It is only by understanding these processes and their influence that a person can be helped to change in a more permanent way. She writes: “*Although specific therapeutic approaches may greatly differ, all therapists try to help patients achieve greater affect regulation, a sense of personal fulfilment and well-being. Undoubtedly, a neuropsychological understanding of the unconscious can provide us with more nuanced approaches to the nature of change and to its underlying factors, the potential impediments to enduring shifts, and conversely the therapeutic processes that may contribute to positive changes.*” (p. 163)

This is particularly important in psychotherapies that focus on accessing the unconscious (such as body oriented therapies, hypnotherapy, dream work etc.). Unless the therapist has a good understanding of how and why our unconscious influences us and can assist the patient to a positive change, the risk is that unconscious remains a mystery (following an old view of the unconscious) with no or little real change for the patient. Ginot writes: “*Only on recognising and becoming aware of the nature of our emotional and behavioural neural patterns, the childhood necessity for an array of defences, the emotional and interpersonal learning that took place unconsciously and without our conscious will or participation, our helplessness as children to affect through the course of events, can we start and attempt to connect with painful self-systems.*” (p. 125)

With this book Efrat Ginot is taking a big step to close the gap between neuroscience and psychology. It is an essential process if we are to develop the best possible strategies for helping people to move away from having the unconscious as their own worst enemy, to being fully in charge of their lives in a positive way.

ESSAYS ON LIFE, DEATH AND BEYOND

David Lorimer

■ CONVERSATIONS WITH THE SOUL

Andrew Powell (SMN)

Muswell Hill Press, 2018,
236 pp., £18.95, p/b –
ISBN 978-1-90899-528-5

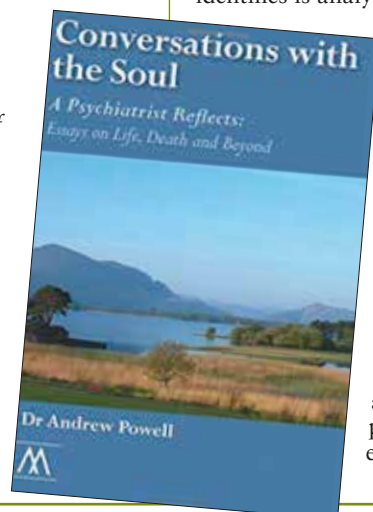
I reviewed the first volume of Andrew’s papers in last summer’s issue, and this volume is just as insightful, wise and compassionate. The foreword by Anne Baring highlights the contemporary catastrophic loss of soul and sense of the sacred, which both she and Andrew feel is at the root of today’s epidemic of mental health challenges in a materialistic and consumerist society that has no room for this dimension of life and leaves us feeling alienated and disconnected. Surveys now show that one in six of UK adults are experiencing a common mental health problem in any given week, so Andrew asks the question: ‘could it be that modernity, with its incessant materialistic and secular pursuits, is this changing people from their spiritual core and the innate values of truth, beauty and goodness?’ In my view, the answer is indeed yes, which makes this such an important volume in terms of spiritual care.

A chart on p. 49 gives an overview of current mainstream psychiatry, dominated as it is by biological and pharmaceutical treatments with an emergence of mindfulness and CBT into the mix. The third strand he identifies is analytical psychology derived from Jung, who had a personal encounter with and understanding of the spiritual and the sacred and whose work is reflected in transpersonal therapies including many featured here such as spirit release, past life memories and soul-centred psychotherapy. If the ego has an important

role during the first half of life, the soul sets the agenda for the second, as Jung himself observed when he remarked that all his patients in the second half of life were seeking a spiritual outlook (Andrew remarks in one talk that ‘while the ego seeks to be loved, the soul’s desire is to love’). This search is underpinned by a quest for healing and wholeness, which Andrew addresses in a number of these papers. Nor does he lose sight of the human condition, asking how much of our suffering is intrinsic and how much self-created. We come to appreciate this in some of the many case histories recounted. He expresses this beautifully at the end of an essay on recovery and well-being: ‘as the soul does not pass judgement, our patients will not feel judged. Because the soul is compassionate, our patients will be helped to forgive themselves and others. And, because the soul knows only love, our patients are helped to heal.’ (p. 121)

Pioneers like Andrew require moral courage in order to take a stand against the prevailing materialistic outlook. This is apparent in what he has to say about healing, past life memories and spirit release. These last two areas imply survival and reincarnation, neither of which is possible within a mainstream view. In cases where spirit release is the appropriate intervention, conventional psychiatrists risk misdiagnosis and corresponding mistreatment, which is part of the larger picture that pathologises spiritual emergence. This has even been noted in a statement by the WHO which states that ‘this reductionism or mechanistic view of patients as being only a material body is no longer satisfactory. Patients and physicians have begun to realise the value of elements such as faith, hope and compassion in the healing process.’ (p. 40) His own account of his past life memories makes fascinating reading, including the phenomenology of death representing floating out of the body, which is pretty much universal. What matters is the insight gained rather than the literal truth of the episodes. He also recounts a powerful consultation about his heart valve with Stephen Turoff ostensibly bringing through ‘Dr Kahn’, after whose treatment his doctor was surprised that his measurements had all improved.

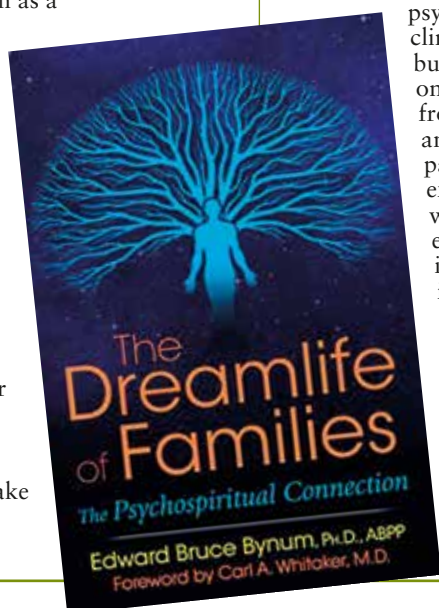
If the vocation of doctors is under stress, so is the health system as a whole. Andrew presents an interesting analysis of the NHS in terms of Maslow’s hierarchy of needs showing how at every level - physiological, safety, love/belonging, esteem and self-actualisation - these needs are unmet, with a corresponding



demoralisation within the system and general undermining of trust. He also observes that, 'from an archetypal perspective, Western medicine is a triumph of the analytical masculine mind' and has created a corresponding imbalance, as the cultural work of Iain McGilchrist highlights. It remains to be seen whether the higher proportion of women medical students coming into the system creates a radical shift or whether these women are moved into their own masculine aspect.

The recent Mystics and Scientists conference addressed the theme of technology, spirituality and well-being - here there is a pertinent contribution on technology and the soul in the 21st-century and the rise of techno-pathology mediated by screens and video games as well as the hazards of social media. Prescriptions of Ritalin for ADHD increased from 325,000 in 2011 to nearly 1 million in 2015. The statistics he quotes are alarming as children grow up in a world of things rather than people, undermining the development of their social skills in the process. Andrew also identifies a breakdown of trust in terms of disinformation, citing the cover-up of geo-engineering projects in climate manipulation as an example (www.geoengineeringwatch.com). Many mainstream sources would put this down to wacky conspiracy theory, and I identified with Andrew when he says that he finds himself caught between this accusation and the scepticism of normality - as I have remarked elsewhere and in a book on conspiracy theories in books in brief below, the use of this label has been very effective in stifling debate.

For me, the take-home message of the book as a whole is the importance of widening the scientific and medical view to embrace the soul and spirituality, both as a reality and as a significant factor in therapeutic interventions. Andrew's life work has been devoted to this cause as the contents of this inspiring book amply demonstrate. It will hopefully encourage other psychiatrists and physicians to follow in his footsteps and take up the torch.



..LIFE IS BUT A DREAM

Gunnel Minett

■ THE DREAMLIFE OF FAMILIES - THE PSYCHOSPIRITUAL CONNECTION

Edward Bruce Bynum, PhD

Inner Traditions, 2017, 275 pp.,
£14.99, p/b -
ISBN 978-1-620556-320

Although we still have a lot to learn about dreams, why we have them and what they mean, we can conclude that they play a big part in our lives. As this book points out, they often represent a true expression of our innermost thoughts, a version that is uncensored by the conscious mind. They can also express our connection with others, family and friends, past and present in ways we normally would not perceive them. Dreams can also solve problems of all kinds both past, present and future ones.

From perhaps a somewhat unexpected environment, I can give a personal example everyday 'problem solving' via dreams from my own past history when I worked in a bank. Despite an otherwise very conservative environment, we had a well establish method of solving mistakes we had made during the day, which usually meant the embarrassing situation of giving customers too much or too little money. When we could not find where we had made the mistake, we were told to go home and sleep on it. Mostly this had the effect that the person in question came back the next morning having 'remembered' in a dream where they had made the mistake.

In his book, Edward Bruce Bynum presents a comprehensive and integrated view of traditional dream analysis and family psychology both from a clinical science approach, but also drawing on old traditions from Africa, China and India and from parapsychology. He explains and illustrates with numerous examples how our individual unconscious is part of a larger collective or family unconsciousness and how dreams can express this.

One of the really positive aspects of the book is that it approaches our interest in dreams

both from a current and historical angle: it points to the way we lived in (extended) family groups and the role dreams played there. This ancient way of life may often be dismissed as superstition based on ignorance ('now we know better'). But, as the author points out, even if we now live more isolated lives, and have more individual freedom, the extended family can often have a positive effect on our inner wellbeing. We seem to have a need to get so close to others that we can share both their conscious and unconscious life in the form of dreams.

However, going back to closer family ties doesn't necessarily mean returning to the biological family. Such a return to closer family ties would probably demand an impossible amount of change in our modern societies. But an 'extended family' does not have to be biological. As Steve Minett describes in his book *Gazing at the Stars*, well managed family constellations aimed at providing the optimal environment for child care can be a very good solution for adults as well as children.

Bynum's book is full of recorded dreams that reflect both major and minor events in our lives such as illness, birth and death and medical emergencies, that all seem to have a special effect on our dreamlife. These dreams can also be simultaneous shared dreams, telepathic or precognitive dreams. Regardless of the fact that these types of dreams may not have an explanation within our current scientific paradigm, they most certainly appear often and strongly enough to be taken seriously, which is exactly what this book is doing.

PHILOSOPHY- SPIRITUALITY

A RENAISSANCE MAN

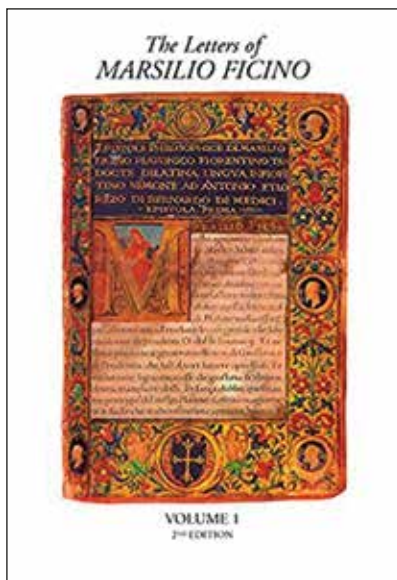
David Lorimer

■ THE LETTERS OF MARSILIO FICINO, VOLUME 1, 2ND EDITION

Marsilio Ficino

Shepherd-Walwyn, 2018, 286 pp., £25, h/b - ISBN 0856835-192

Marsilio Ficino (1433-1499) of Florence epitomised the definition of the Renaissance man as philosopher, scholar, doctor, musician and priest. He translated the whole of Plato and many related classical writings into Latin, and Clement Salaman writes in his introduction that these writings 'contain the key to



the most important knowledge for Man: knowledge of himself, that is, knowledge of the divine and immortal principle within him.' For Ficino, the central aim of human life is return to the divine source, as articulated in his Platonic Academy at Careggi. Salaman also explains that the immortality and divinity of the soul was the basis of the 'dignity of Man'. Ficino was the mentor of Lorenzo de' Medici, who succeeded his father Piero and grandfather Cosimo in 1469. As a musician, he sang devotional Orphic hymns with his lyre. His influence extended way beyond Italy, and his correspondents included Dean Colet of St Paul's. It is interesting to reflect how 'a knowledge of ancient literature and history became the unquestioned basis of education in the West', and I remember that my time at Eton marked the transition from classics to science among the leading scholars.

This first book of letters was translated from Latin into Italian during the author's lifetime, and his correspondence eventually extended to 12 volumes by the mid-16th century. It is notable that Ficino himself gave titles to his letters, indicating their serious and often didactic nature. Here is a sample from the 131 contained in this volume: the way of happiness; medicine heals the body, music the spirit, and theology the soul; how to praise without flattering; consolation on someone's death; matters of love; loss of time is a serious matter; the truth of God's splendour, beauty, and love; on bearing injury; the folly and misery of men; what it is to live well; no virtue is more lovable than kindness; on perseverance; giving thanks. A number of these themes appear more than once, but these give an idea of the scope and flavour of the letters.

Letter number 9 entitled 'on divination and the divinity of the soul, gives the following account, which is worth quoting in its entirety:

The father of my mother Alessandra was called Giovanni and her mother was called Angela. Alessandra was in Figline, Giovanni in the town of Montevarchi, and Angela in Florence. Angela wrote to Giovanni and Alessandra that she was well, and would return on the following day. They read her letters, and while asleep that night they both saw Angela at the same time. She appeared to Alessandra in the entrance of the house, and when the daughter was greeting her mother as if she had returned home, the mother avoided her daughter's embrace. 'Farewell,' she said, 'and take care that the priests pray to God for me.' But to Giovanni she said, 'My Giovanni, how I grieve at your misfortune! Farewell, and ask that prayers be offered to God for me.' Suddenly aroused by these visions, they both cried out, thinking her to be dead. They sent to Florence. The news came back that she had departed this life that very night.

There are two other cases in this same letter, and readers familiar with this kind of phenomenon will recognise the deathbed apparition, well documented as far back as 1886 in *Phantasms of the Living*.

The letters give considerable insight into the close relationship between Ficino and Lorenzo de' Medici. They are impatient for each other's letters, Lorenzo writing 'as soon as you have an opportunity to write, I beg you delay no longer, nor let me vainly wait so long for your letters'. Lorenzo replies to a letter of gratitude, referring to Marsilio's translation of Plato on love, saying that 'in that book you wrote about love you so skilfully described every state of love that nothing may be discovered in love which cannot be read in that book, nor may anything be read there which is not in love.' In response, Marsilio expostulates: 'your exceptional humanity and your noble qualities arouse in me the deepest gratitude [for what he had written about his work] but your letter discourages me from expressing it.' Continuing in this vein, Lorenzo writes in another letter that 'a philosopher should not talk too much - but nor should he say nothing!' Marsilio in turn rebukes Lorenzo for accusing his silence, suspecting that it springs from forgetfulness, and forgetfulness from absence. He wittily continues: 'you ought to remember that if Lorenzo is not absent, neither is Marsilio, for Marsilio dwells in

Lorenzo if the soul is everywhere at the same time, as you yourself truly proved in your recent letter.'

There are any number of letters on which one might comment, demonstrating as they do nobility of mind, warmth of heart, sage advice and sublime aspiration. Letter 115, also to Lorenzo, is a seven-page disquisition on happiness, which Ficino argues springs from God alone, and that love unites the mind with God more swiftly than cognition since its power lies in union. He writes that the soul becomes divine, not by considering God but by loving Him; as wood becomes fire because it draws heat, not light from the flame. This is followed by an extraordinary theological prayer to God, which begins with the following five lines:

O boundless light, observing yourself, seeing all things in yourself!

O infinite sight, shining from yourself, illuminating all!

O spiritual eye, whom alone, and by whom alone, spiritual eyes see!

O immortal life of those that see!

O all goodness of the living!

The end is equally exalted – 'may we, without distraction, infinitely love your infinite beauty. May we, without surfeit, eternally enjoy your infinite good.' The use of the word 'surfeit' in this context is typical of Ficino's disciplined and moderate approach to life. It is hard to disagree with Christopher Booker's review of the original edition that these letters comprise one of the spiritual classics of the past thousand years.

ARE NOT ALL MYSTICS DANGEROUS?

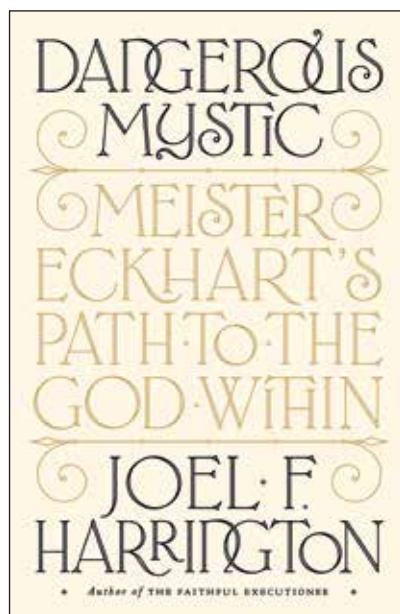
Nicholas Colloff

■ DANGEROUS MYSTIC: MEISTER ECKHART'S PATH TO THE GOD WITHIN

Joel F. Harrington

Penguin Press, 2018, 361pp., £25, h/b - ISBN 978-1-101981-580

When the distinguished scholar of Christian Mysticism, Bernard McGinn, arrived at London's Heathrow airport in the 1980s, he was asked by the Immigration Officer why he was coming to England? "I am giving a paper at a scholarly conference on Meister Eckhart," he replied. "Ah! Eckhart. I have always wanted to get a



better understanding of 'gelassenheit'. Can you explain it to me?" So Professor McGinn, by explaining one of Eckhart's key terms, got entrance into the country whilst wondering if *this* was the state of interest in Eckhart in England need he have come at all!

This is in radical contrast to Eckhart's currency shortly after his death in 1328. In 1329 certain of his propositions, though not the man himself, were condemned as heretical or suspect; and, though his two greatest followers, Henry Suso and John Tauler, bravely referred to him, in passing, both saw fit to adapt, amend and soften his radical stance for the audiences they now addressed. Eckhart sank into obscurity until the birth of German nationalism in the nineteenth century saw Eckhart both as an innovative user of the German language and as a proto-Protestant and sparked a revival (and, importantly, a Catholic reaction that sought to reclaim him as one of their own). It is a resurgence that has not lost steam nor ceased to multiply Eckharts - a phenomenological one influential on Heidegger, an existential one for Sartre, a subversive post-modern one for Derrida and a New Age one in the hands of Eckhart Tolle (whose very pseudonym offers homage to the Meister).

But who was Eckhart and can history help create a clearer picture? Joel F. Harrington thinks it can and proceeds admirably to demonstrate how.

Firstly, by reminding us that the Middle Ages rather than being, as its name suggests, a waiting period between two periods of development was, itself, a time of intellectual ferment. Aristotle, through the

refracting lens of the Islamic world, was being rediscovered. Plato and Neoplatonism were a countervailing stream of thought. New architectural forms and economic systems were being born. Europe was rapidly urbanising. Eckhart was at the centre of these currents - both as an intellectual, teaching, and receiving his doctorate from the University of Paris; and, as an administrator and diplomat for his Dominican Order. Eckhart was pushing at the boundaries of what was thought not against the trend but with it, at its liminal edge.

Second, because these often disruptive changes were igniting a renewed and deepened search for meaning. One that the outward forms of the Church, though important, could not wholly fulfil. There was an inward turn towards a deepening devotion and a search for experience. This search for experience was not hunting after 'mystical experience' as a discrete category of private experience to be set against other kinds of experience since this is a modern category alien to the medieval mind. It was a search to create an understanding of the context in which anything at all takes place; and, how we are situated within that totality; and, how it could be lived out in practice. For Eckhart, there was no separation between his ontological and metaphysical explorations and his spiritual life nor between his daily practice as a Catholic priest and his inward transformation. To know something, anything at all, required one to be in a certain kind of being. A metaphysical question required a transforming spiritual answering.

Third, though this renewed inwardness took place almost without exception in the Middle Ages - the Cathars being the great exception, - within an accepted Christian Catholic framework, it was not free of real tensions. These Eckhart fully embodied and in doing so leaned towards the new, the open and the inclusive. How acceptable was the new learning? Completely, as Eckhart worked towards his summa, his account of creation and its continual coming to be as divine gift. Within this how do we accord truth-telling to non-Christians - pagan Greeks and the Arabs and Jews who had translated and developed their thinking? In Eckhart with comfortable acceptance, true seeing was recognised wherever it was found. Was it legitimate to downplay the importance of external works and devotions and prioritise the inward journey? Not only legitimate but in Eckhart's view necessary for salvation was the result of stepping into a 'wayless way',

a self-emptying that allowed God in, clinging to the forms of religion cluttered that space, distorted its clarity and kept one bound to one's own image of God rather than being freed into the imageless Godhead. Was it acceptable to embody this new learning in the ordinary sermon for the layperson rather than restrict it to learned texts in Latin for the educated few? Necessarily so because this 'wayless' way was the reality for all, we must all step through the mediation of form, including even that of the Church, if we are to become freedom. How far could lay people be autonomous guides of their own souls? Since guidance is ultimately always of God and must come to birth in every soul, none of us is autonomous nor a guide for we are always found in, and by, God not by ourselves.

Harrington pilots us skilfully through all these dimensions and is careful to show the context in which and from which Eckhart worked and lived, how he responded to it and, critically, how his thinking developed over time, a pattern often lost in more theologically or philosophically orientated studies. This showing forth of Eckhart's development has the double bonus of helping both clarify and illuminate the thought itself - and Harrington's descriptions of this are models of lucidity and accessibility - and showing just where he sits within the then boundaries of thought. In this Eckhart is seen as both orthodox and yet liminal, especially in how he expresses himself, always pushing into the unsayable with daring, paradoxical images aimed at teasing thought out of itself into a renewing way of naked intuition.

He also then aptly describes the circumstances surrounding Eckhart's downfall. This was not simply the Church condemning the mystical heretic but rather Eckhart finding himself in the crossfire of two overlapping struggles. The first was spiritual over the control of the lay movements that continued to spring up to deepen the commitment to, and experience of, faith. The second the all too temporal struggle between the Holy Roman Emperor and the Pope for authority and power. In the context of which a partial condemnation of certain of Eckhart's propositions (often lifted out of context) fitted the Pope's purposes. By way of aside, the prime Papal concern was not so much as to the truth or otherwise of the said propositions but what might be made of them by a lay audience, unversed in the sophisticated, and yet often 'conventional' theology that underlay them.

Though biographical details of Eckhart's life are sparse by the time you have finished Harrington's study the man and his times have been ignited with life; and, most importantly, Eckhart's abiding relevance is reaffirmed and deepened. Here was a man who set out to think through his faith and offer it as an abiding way of being in the world that was intellectually alive and credible and that made existential demands on any life that would engage with it. Less a 'dangerous' heretic than a bold explorer of reality (that often our prejudicial view of the Middle Ages suggests must be unusual and heterodox – Harrington suggests we think about this again).

Meanwhile, to return to 'gelassenheit', one of Eckhart's coinages that might be translated 'letting-go-ness' that is at the heart of the spiritual journey. You must assimilate the acts of piety and let them go, embody the virtues such they become second nature and let them go, pass through all images of the eternal and of the divine letting them go, until naked and bare and nothing, all can be born within you, realising your at-one-ness with the One who is. Discovering in this that freedom in which flows all the reality of wisdom and justice that enables you to act rightly in the world because knowing it rightly. It is in this very real and demanding existential challenge that Eckhart, like any true mystic, reveals their dangerousness to the conventions at any time!

Harrington adeptly invites us to a consideration of this quest embodying it beautifully in the man himself and in his actual time and place that, as often the case, liberates him to be seen anew, now in our time and place.

THE LIMITS OF FORCE

David Lorimer

■ SELECTED ESSAYS 1934-1943

Simone Weil

Wipf and Stock, 2015 (1962),
231 pp., \$29, p/b –
ISBN 978-1-4982-3921-9

I imagine that quite a number of readers will be familiar with the work of the great French philosopher Simone Weil (1909 – 1943) who died in England during the war. I reviewed an excellent book on her work in relation to continental philosophy a couple of years ago. This volume contains essays from the last nine years of her life, a turbulent period in Europe, and I bought it principally for the essay on the Romanesque Renaissance as it was connected with the Cathars and the Occitan culture wiped out

in the Albigensian Crusade, which for Weil was an essay in totalitarian spirituality, including as it did the establishment of the Inquisition.

This brings up the first important theme I want to consider, which is partly related to the presence of the chivalrous concept of love in the Troubadours of this region, which Weil characterises as a rejection of force. She observes that 'everything in the world is exposed to the contact of force, with only one single exception, which is love.' (p. 49) This chivalrous love, for her, is a patient attention towards the loved person, which, in its plenitude, is the love of God through the person loved. In the case of the Cathars there is a horror of force, non-resistance to evil and a willingness to endure martyrdom; they led by example, and were known for their purity and sanctity. In an essay on human personality, she defines love as 'intense, pure, disinterested, gratuitous, generous attention' (p. 28). Attention is a key term in her spiritual approach along with the other contemplative processes of *entendre* and *attendre* - listening and waiting, hence the reference above to patience.

The essay on Human Personality is dense and profound - its starting point is that the good is the only source of the sacred, and she goes on to say that this is not to be found in the person, but rather in the impersonal or universal. For her, truth and beauty dwell on this level of the impersonal so that 'what is sacred in science is truth; what is sacred in art is beauty' (p. 14) This level of impersonality can only be reached through a solitary and silent form of attention - we might now say meditation - that has nothing to do with subordination to the collective and seeks like the mystic to transcend the ego. If truth and beauty are always and everywhere good, the same applies to justice and compassion, which is then linked to the impersonal and divine order of the universe and reflected in the historical and political essays in this volume.

An essay on the Great Beast discussing the origins of Hitlerism (1939 – 1940) is magisterial in scope and penetrating in its analysis. For her, Napoleon was less of a propagator of liberty and equality than of the centralised State, the State as sole

fountain of authority and object of devotion, which in France she traces back to Richelieu and Louis XIV – it manufactures order and power. Historically, she sees the origin of this pattern in Rome with its discipline, organisation, ruthlessness and unswerving resolution, sacrificing everything to prestige. She illustrates this with the Carthaginian war. The implications for our time concern the nature of the nation state with its justifications for political necessity - she refers to the disguising of aggression as legitimate defence, of which one can think of contemporary examples. Given state sovereignty, 'there can be no higher authority with the right to judge its actions' so that its power is 'limited solely by the power of other sovereign nations, that is to say by war or by the explicit or implicit threat of war' (p. 137). Using examples from the aftermath of World War I, she notes that the juridical concept of the sovereign nation is incompatible with the idea of international order, as was already apparent in her day with the League of Nations. I learned from the work of David Ray Griffin how both the League and the UN were in fact set up on a false premise in that the US retained the right and still does to do exactly what it wants without consultation with other nations, unless it suits US interests. For Weil, the fact that the dogma of national sovereignty was left intact is a singular inconsistency that still limits progress in achieving a multilateral international order, as my great-grandfather James Lorimer had already observed in the 1880s. Some degree of supranational authority will be vital for the sustainability of the planet, as Nicholas Hagger argues in his books reviewed in Issue 127.

Finally, I come to draft for a statement of human obligations, written in 1943. Already in the essay on human personality she is critical of the modern notion of rights, which she sees as dependent on force - she

herself turns to 'that other force which is the radiance of the spirit'. I remember in the late 1980s there being a draft charter of human responsibilities to balance the charter on human rights, but this was supported by the Dalai Lama and therefore rejected by China. Weil reiterates her argument that truth, beauty and justice originate in a transcendent realm with which we can forge a



link 'through directing attention and love to a reality beyond the world and receiving good from it'. For her, the needs of the body are well known as food, warmth, sleep, health, rest, exercise, fresh air, but the needs of the soul she lists in pairs of opposites that balance and complete each other - much food for thought here: equality and hierarchy, consented obedience and liberty, truth and freedom of expression, solitude and privacy along with some social life, personal property and collective property, punishment and order, participation in a common task along with personal initiative, security and risk. One can see that political structures are to be found somewhere along the continuums but they also represent enabling conditions for human flourishing. From these reflections, one can appreciate the range and depth of Weil's thought involving perennial spiritual themes as well as practical political considerations. This is particularly valuable at a time when we have more need than ever for profound reflection.

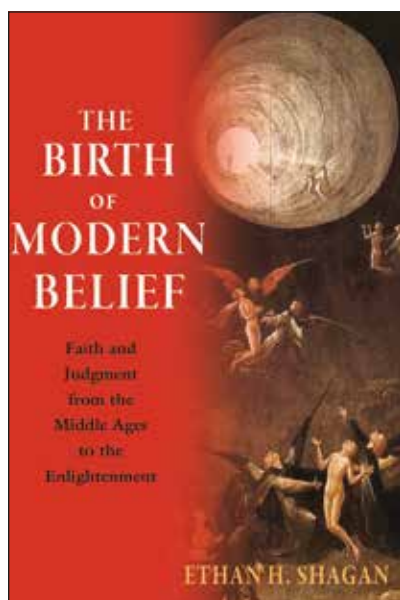
PARADIGM SHIFTS IN THE NATURE OF BELIEF

David Lorimer

THE BIRTH OF MODERN BELIEF

Ethan H. Shagan

Princeton, 2019, 385 pp., £27, h/b ISBN 978-0-691-17474-7



This game-changing book will alter the way you understand the history and nature of belief in the West from the Middle Ages to our own time. The subtitle referring to faith and judgement indicates the

structure of the argument as belief is increasingly defined in terms of the sovereign judgement of the individual. This means that belief has become a synonym for opinion or judgement against a background that distinguished philosophically between knowledge and opinion going back as far as Plato. He distinguished between *episteme* as knowledge and *doxa* as opinion, which is further divided into *eikasia* or imagination and *pistis* as belief. Knowledge is then defined as *orthos doxa*, i.e. right opinion developing into religious orthodoxy where knowledge 'is justified true belief.' This theme recurs throughout the book, but, curiously, there is no mention of *gnosis* as experiential knowledge of unity corresponding to belief, as explained by Clement of Alexandria - however, there is some discussion of *scientia* as secure and demonstrable knowledge though based on deduction. For Clement, *gnosis* is not inconsistent with *pistis*, but rather confirms it as lived experience, which is true of mystics throughout history such as Eckhart, Ruysbroeck and Teresa of Avila. A further important category is *peitho* or persuasion, linked etymologically to *pistis* and relating to questions of evidence and argument to be revisited below.

The treatment is historical and chronological, beginning with what the author calls a crisis of epistemic authority in the Middle Ages, with people asking if they could rely on anything, and if so on what grounds. His fundamental point is that 'belief is not the natural or simple category it is usually presumed to be. It is instead a constantly changing space where the nature of religious knowledge is contested and constructed.' (p. 19) The starting point is mediaeval Catholicism as public participation and social discipline entailing obedience to authority, an position still maintained by Cardinal Manning in the 19th century when he argued that it is not authority that generates truth, but rather truth that generates authority. Aquinas (p. 47) defines belief as 'absolutely certain assent to propositions that are given by perfect authority [the Church] rather than known according to perfect demonstration.' A curious corollary is that wrong belief is just opinion as belief is guaranteed to be true. The first phase is infused faith at baptism, which becomes acquired faith and belief as *credulitas*.

The next chapter moves onto the Reformation, where belief becomes hard and rare: 'genuine belief in Christ must necessarily include trust that by belief alone you are saved' (p. 68) thus reflecting salvation by faith rather than works

- propositional belief is transformed into saving faith and expressed in the publication of countless catechisms embodying creedal Christianity. The counterreformation in Loyola brings belief back to obedience and acknowledgement of human limitations - people were to give assent to what the Church taught.

We come now to the invention of the unbeliever, a fascinating chapter in discussing the meaning of the term atheism, ranging from what we would understand as unbelief to debauchery and licence, which was thought to follow from this. The atheist in the second sense was one who failed to apply the ethical injunctions of faith. For Catholics, Protestants based themselves on doubt and subtraction as well as the heresy of choosing (the Greek word is derived from 'to choose'). The very hardness of Reformation belief resulted in the world filling up with unbelievers well before the 18th century; the weight of belief had become unsustainable, belief became pressure to examine oneself, and nearly everyone fell short due to weakness and sin. If the problem for Protestants was the necessity of an impossible perfection, for Catholics it was the necessity of an impossible obedience (p. 146). This is highlighted in the tension between experience and authority in St Teresa of Avila and St John of the Cross. The former speaks of 'knowledge of a truth that is the fulfilment of all truths', which is surely a definition of *gnosis* but is not categorised as such.

The early stages of modern belief begin with Montaigne, who reacts against the intolerance and war brought about by dogmatic certitude, maintaining that no belief should be held with certainty and that everything is a matter of opinion built on intrinsically unreliable human cognition. Like Campanella, he therefore supports individual autonomy and judgement, including appeal to the senses and to testimony - a form of argument first thought to support the Gospels, but then used to undermine them as people become more sceptical of events allegedly predicted by the prophets and confirmed by miracles (p. 194). Belief becomes more aligned to the persuasion of the mind by evidence and hence probabilistic and provisional.

The chapter on enlightened belief begins with Descartes and his defence of individual judgement based on rigorous reasoning. This view is encapsulated in the 1662 book on the Port Royal Logic where belief is defined as an individual judgement reached after weighing evidence, so Christian belief becomes one

particular kind of knowledge- or truth-claim. Pascal puts forward the view that the existence of God is both comprehensible and incomprehensible, hence his idea of the wager. In 1689, Locke develops his argument equating belief, assent and opinion where Christian belief is based on opinion founded on non-demonstrative evidence, an argument one still finds among the new atheists. However, an interesting implication is that scientific theories are also associated with belief rather than knowledge in this way of thinking. Scepticism as defined by Bayle becomes a novel configuration of belief based upon judgement but 'untethered from old assumptions about authority and certainty.' Religious belief becomes a matter of individual judgement about religion.

The next chapter on belief in the human moves the axis of understanding towards the creations of human thought and imagination. In concluding, the author suggests using the term credulities to indicate spaces or conditions of believing and remarking that every era is credulous, but in different ways. Hence, as we have discovered anthropologically, 'one culture's knowledge is another culture's belief' (p. 283) and our epistemological categories determine which kinds of claims are credible, as we have also seen with the recent Galileo Commission Report where a particular naturalistic understanding of the uniformity of nature leads scientists to ignore or reject evidence for consciousness beyond the brain. In a space of sovereign judgement, 'individual, propositional assent [is] based upon whatever criteria the believer finds most convincing' whether empirical, intuitive, traditional or existential. In this sense, the author argues that belief has not in fact declined but has proliferated into diverse forms, each based on sovereign individual judgement. I gained a far greater understanding of the nature and history of belief from this erudite study which I can commend to readers with an interest in this field, which, after all, affects us all in terms of our own beliefs.

PSYCHO-SPIRITUALITY AND STOICISM

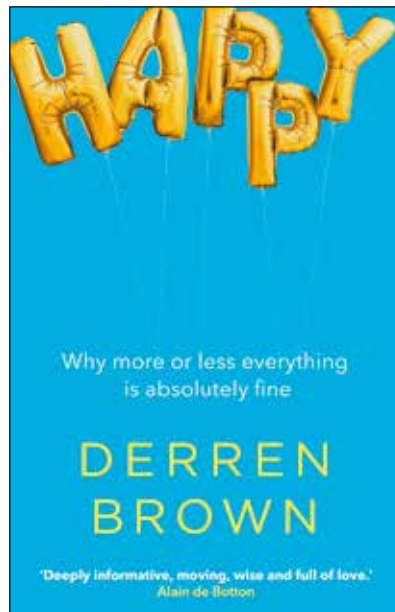
Julie Soskin

■ HAPPY

Derren Brown

Corgi Books. 2017, 557pp.,
£8.99, p/b
ISBN 978-0-552-17235-6

Derren Brown is largely known by his performances as a mentalist magician, so readers may be surprised by the



contents of this book. It is primarily about philosophical tenets starting with Socrates and Plato through to modern day philosophers and psychologists, with the teachings of Stoicism running throughout the work.

'Happy' is written for public consumption; nonetheless it is by no means inferior because of that, giving well-researched information of philosophers down the ages. Brown suggests that in modern times, philosophy has become highly academic 'concerning itself more with matters of language, logic and metaphysics rather than the business of living well.' He says that prior to the Christian age, philosophers were in amongst the people opening discussions to help understand themselves and life.

Brown berates the notion of positive thinking being the panacea of all ills and in a chapter named, 'The considered life' he warns us to be careful about our response to these ideas, as we may be 'at the mercy of whatever voice happens to be the loudest around us. These may come from the church; from forms of cheap spirituality... or from what Jung describes as, 'the un-lived lives of our parents'. Leading a considered life, Brown says, is about getting our story right for ourselves.

Although he clearly is not in favour of the worst aspects of the New Age he notes that ancient wisdom has become the source of many of our modern day self-help therapeutic methods including neuro-linguistic programming (NLP) and cognitive behavioural therapy (CBT). The main bulk of the philosophy running though this book is about Stoicism, from which the ethos of some of these therapies has been formed.

He relays ancient philosophies, acknowledging that these do not always take account of 'the turbid domain of the unconscious.' He says that the Stoics' most powerful and prevailing idea was that we should 'limit our desires and if we change our attitude, the pain of those external factors can disappear'. The ethos is echoed with such quotes as Marcus Aurelius, the philosopher emperor that 'problems are not by events in the world but rather by how we interpret them. Get rid of I am hurt and you are rid of hurt itself.'

This is primarily a book for the pragmatists, not in the vein of the abundance of New Age writing, of which he is critical, but Brown gives a fulsome account of different ways of living. It is, however, somewhat disappointing that he dismisses anything remotely spiritual. Like so many other people, it seems that he has confusion over the difference between spirituality and religions. Nonetheless, he quotes Pierre Hadot, the French philosopher who says Stoic works must be read in their context as 'spiritual exercises as they were interested in an entire transformation of self and its relationship to the universe' Along the spiritual pathway we understand that we must reach a point where it's not so much that we no longer care what people think about us but we no longer mind. In that vein Brown amusingly quotes novelist David Foster who says 'you will become way less concerned with what other people think of you when you realise how seldom they do!'

He talks about the Christian notion of original sin, which he believes alienated humanity from the divine. However, he propounds that, finally 'we are getting ready to release ourselves from the trammels of religion', in revisiting the philosophers prior to the onset of Christianity. Seneca, one of the few Stoic writers whose words are extant, preferred to encourage his pupils to apply their own thoughts and teachings to their own lives. This of course is in line with the current social science research into one's 'lived experience'.

Continually using the Stoic theme there is a hefty chapter on anger, in which amongst other things Brown suggests that Bible stories are influenced by Stoicism, for instance John 8:7: 'he who is without sin among you, let him be the first to throw a stone', to Seneca's 'If we are willing in all matters to play the just judge, let us convince ourselves first of this, that no one of us is free from fault.'

As death is something many people fear, he is arguably justified in bring this subject into four chapters of a

book entitled, 'Happy'. He quotes Andrew Marr who said, that whilst he was waiting to die, 'It was the most important time of my life'. Philip Gould also says 'I now regard terminal illness as a weird kind of privilege.' Those who have had transformative spiritual experiences would understand this, as they can often give the feeling of a form of death; death of self.

This is a highly readable book whether or not you are familiar with the philosophers Brown copiously quotes. He says; 'I hope that some of the ideas will take root and affect you for the better.' In that he has fulfilled his own brief, as *Happy* is thought provoking and raises valuable questions about ourselves and the world in which we live.

Julie Soskin (M. Phil) is an author of nine published books and has worked in the field of psycho-spiritual studies for over thirty-five years. She developed *The Insight and Intuition Learning Programme*, implemented in various educational colleges, including part of a BSc at Westminster University. Julie works as a sensitive, spiritual director and facilitator of consciousness studies. (Email: julie@julesoskin.com)

THE PHILOSOPHE - EXPANDING SPACE AND TIME

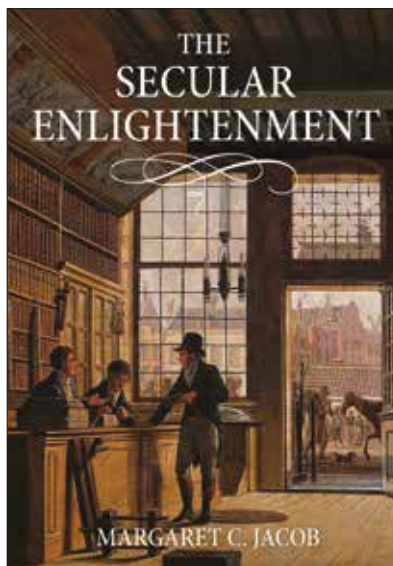
David Lorimer

THE SECULAR ENLIGHTENMENT

Margaret C. Jacob

Princeton, 2019, 339 pp., £24, h/b
– ISBN 978-0-691-16132-7

This is a very erudite and authoritative study of the 18th-century European Enlightenment, taking readers on a tour including London, Paris, Berlin, Edinburgh, Vienna and Naples where the relative emphasis also partly depends on local conditions. Many unfamiliar names appear along with the more famous, and the author also digs up some extraordinarily interesting detail. This process of secularisation shifts attention away from religion and salvation into temporal well-being in the here and now 'without necessary reference to a transcendent order.' New worlds opened up both through navigation and exploration of the heavens expanding space, and expanding time with the work on geology by Buffon and Benoit de Maillet, the latter estimating the age of the Earth at 2 billion years as early as the 1730s. The new heresies are now recognisable as orthodoxy or at least mainstream in our time in terms



of deism and materialism leading to atheism. The intolerance exemplified in the 17th century wars of religion also played an important background role, as did the emergence of larger cities with their clubs - including Freemasons - pubs and cafes where like-minded people could freely meet.

Many authors like Voltaire published their work anonymously or in more tolerant countries like Holland, and Voltaire regularly denied authorship of his anonymous works such as the *Sermon des Cinquante*, his most scathing attack on the veracity of Scriptures and which would have landed him in prison if authorship had been able to be proved. An even more scandalous book was *The Treatise on the Three Impostors*, these being Jesus, Mohammed and Moses, dating from about 1700 and which, despite the efforts of the censors, most people in enlightened circles had seen or read by 1750. The author explains the lengths to which censors went, including arresting booksellers and publishers. One extraordinary character is the Widow Stockdorff from Strasbourg, who 'assembled just about every forbidden book known at the time', spending two years in prison in the Bastille for her activity. These books included pornographic as well as materialistic volumes, including the French edition of *Fanny Hill* and probably the 600-page autobiography of the Dutch free thinker Isabella de Moerloose, who taught 'very godless and abominable things', finishing her days in a prison for the mentally ill. Such was the typical price of free thought in the 18th century.

On a more practical level, the author discusses the reinvention of time and the move away from a Catholic context marked by saints' days to a more modern conception. One culmination was the new French

revolutionary calendar lasting from 1793 to 1805 - the 'reign of reason and liberty.' Clocks and watches became more common, with a production in England around 1800 of 200,000 watches a year. The term 'time management' was introduced into Dutch by Constantijn Huygens before 1700, and by the late 18th century we have people describing their days in more detail and punctuality becomes a virtue. On the other hand, Protestants experience a temporal burden, feeling the need to self-monitor their use of time and redeem it, lamenting time wasted on trivial pleasures - the author gives many fascinating examples of such a practice. This all leads to secular and enlightened people occupying time and space differently from the religious.

With 600,000 inhabitants, Paris was the largest city in continental Europe and provided the backdrop for many developments, but also with its own repressive royal form of censorship rather than the Catholic Inquisition. The author covers the work of Bayle, Montesquieu, Jean Frederic Bernard, Voltaire, D'Holbach and Rousseau as well as explaining the role of French Freemasonry. The next chapter moves to Scotland, especially Edinburgh with the emergence of the Scottish Enlightenment with David Hume, Adam Smith, Francis Hutcheson, Adam Ferguson, Joseph Black and James Hutton, among others. Here, the camaraderie of associations like the Select Society was critical in developing forums for debate, and the author draws on many primary sources in her detail. This group was cautious in expressing its religious views, so much so that Hume published his famous dialogues on natural religion only after his death. The background of religious intolerance was more acute, and remained so; Thomas Aikenhead was hanged in 1697 at the age of only 20 for heresy and materialistic views - the notion of nature as sufficient and self organising, as also expressed in the writings of John Toland with a generalised background of Newtonian science. The predominance of social and political improvement is also reflected in the Edinburgh Speculative Society, founded in 1764 and continuing to this day - I became a member in 1978. Commercial links with leading thinkers were also strong in the case of Scotland.

The following chapters move to Berlin and Vienna, then Naples and Milan. Among the German thinkers covered are Christian Thomasius and Christian Wolff, then in Vienna musicians Mozart and Haydn before returning to the high enlightenment with Goethe, Schiller, Lessing, Herder,

Moses Mendelssohn and Kant. Their overall outlook was pantheistic and universal, and we also find a revival of Leibniz and Spinoza. Herder wrote against slavery while providing 'a philosophical foundation for the study of humankind progressing through time and space, developing language, making history. The foundation had been laid for anthropology as well as linguistics (p. 198). Kant was one of the first to articulate a cosmopolitan vision of peace in 1786. Travelling on to Naples, we find that its population of 200,000 makes it second only to Paris in size. Here the author deals with lesser-known thinkers (at least to me) such as Celestino and Fernando Galiani, Pietro Giannone, Cesare Beccaria, Alberto Radicati, Antonio Genovesi and Gaetano Filangieri. Much of this work was political and economic, laying the foundations of representative democracy.

The American and especially the French revolutions mark a critical watershed, as described in the chapter on the 1790s, where Jefferson and Franklin provide an important link. Franklin formulates the universal ethical principle that 'the most acceptable service of God is doing good to man.' Everything is now up for question and rethinking, with the demise of the old ecclesiastical and aristocratic order in many contexts. The author gives many contrasting views through contemporary lives, commenting on the renewed influence of the Stoic Epictetus, whose pagan naturalism is 'complementary to the materialism derived from the new science' (p. 244). The underlying dynamic and direction is how far the revolution should be taken – should it include slaves, women and the oppressed? This process took many decades to evolve and in some places encouraged an enlightened despotism. However, the power of ideals remains strong in promoting liberty, equality and fraternity, a process by no means completed in our time. The philosophes still have much to teach us, not least in terms of freedom of thought and expression for which they fought so hard. The book is an engaging and highly readable *tour de force* which deserves the widest circulation.

PSYCHOLOGY- CONSCIOUSNESS STUDIES

MEANING AND COMMUNICATION

David Lorimer

■ THE EVOLUTION OF CONSCIOUSNESS

Andrew Lohrey (SMN)

ICRL Press, 2018, 310 pp.,

\$19.95, p/b –

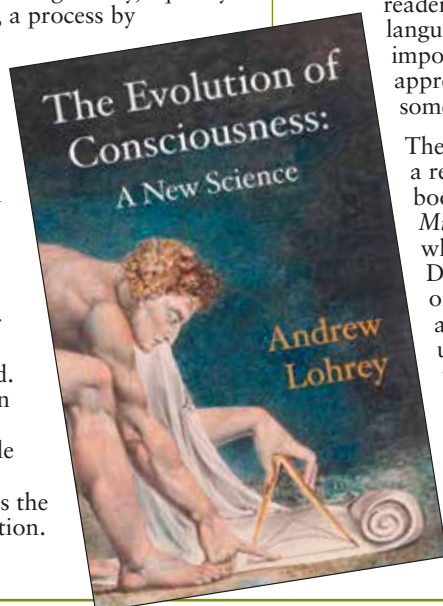
ISBN 978-1-936033-32-4

This is a brilliant and profound work that deserves wider readership among those interested in the future relationship of science and consciousness. It turns the current materialistic understanding of consciousness inside out by postulating a holographic universal mind in which individual apparently separate minds are entangled microcosms. Lohrey shows how the assumption of a fundamental separation between minds leads to intractable philosophical problems. The book is in three parts, the first explaining the overall frame of One Consciousness and many minds with relationships of meaning and symmetry; these show the primacy of meaning over information, a term widely used but misunderstood. The second part distinguishes between what the author calls first and second sight, while the third explains various forms of seeing, culminating in what he calls Self-seeing that mirrors the mystical experience of unity and non-separation. The basic argument is stated in the preface, that 'meaning and consciousness are content words for the same singular, unbroken, interconnected spiritual reality, which I call One Consciousness or the meaning of Meaning.' The informed reader can already catch the language of David Bohm, an important background to this approach, and discussed at some length.

The book begins with a reference to the 2012 book of Thomas Nagel, *Mind and Cosmos*, which criticised the neo-Darwinian conception of nature and called for a transcendent self-understanding, which the present work aims to provide. The author observes that there has been a tendency in materialistic consciousness studies, such as the approach of Dennett, to delete

meaning, mind and consciousness from any discussion of the physical world; these are replaced by 'the separating paradigms of subject versus object' with which philosophers have been struggling ever since Descartes. One potential background philosophy largely missing from this analysis is New Thought, which in the late 19th and early 20th century postulated a universal mind as fundamental and immanent within humans - although the author does mention Emerson's Over-Soul. As explained in his article above, the author postulates a trinity of being, with 'I' represented as a point, 'us' in a circle, then the One Consciousness (That) outside the circle as the ground of meaning and consciousness, which the author sees as two sides of the same coin and embedded in the ground of being. Significantly, the relationship between I and That (p. 37) is 'an insight path that manifests through exchanges of meaning occurring in intuitions, insights, revelations, epiphanies, synchronicities or visions', all of which imply a resonant unity or non-separation. In this scheme intelligence becomes 'the universal, metaphysical agency of life and being: the mind-stuff of One Consciousness' (as Eddington would also have put it).

In his discussion of meaning, the author rightly insists on the primacy of implicit meaning, which also corresponds to what he calls first sight, the very capacity of awareness. The distinction between implicit and explicit is paralleled with that of Bohm between the implicate and explicate orders of dynamic unity and separation or diversity, background and foreground. This exactly reflects the thinking of Iain McGilchrist, whose work would have enriched the analysis here. Distinctions arise at the explicit or explicate level and are already structured into consciousness, as prefigured by Kant in relation to space, time and causality although still within a binary metaphysics. An important part of the analysis is the distinction between five levels of process: 0 as Implicit to Implicit, 1 Implicit to explicit, 2 explicit to explicit, 3 explicit to Implicit, and back to 0 with Implicit to Implicit where the first 0 is embedded and the second in conscious self-recognition; the whole process is one of unfolding and enfolding or, as Walter Russell would put it, refolding. The next chapter on relations of meaning explains this in more detail where relations are structural components of consciousness providing its natural ordering capacity, and these relations are imbued with meaning. One cannot arrive at these integral insights by starting from separation and parts, as represented by



reductionist methodology: meaning is derived from Meaning, the whole as consciousness has priority and 'represents the first and circular cause of everything in the universe.' Lohrey explains how three relations of meaning in terms of symmetry, non-symmetry and asymmetry can be mapped onto the cycle he describes above, which also represents the evolution of consciousness; all this is described with great subtlety (pp. 82-85) - readers will find their minds being reformatted in the process.

The chapter distinguishing between information and meaning and asserting the primacy of the latter is essential reading as so many have climbed on the information bandwagon and have literally confused these levels. Lohrey rightly maintains that communication is not simply an exchange of information, but rather an exchange of meaning that necessarily contains an epistemologically prior implicit dimension. This criticism also applies to the Bohm and Hiley concept of active information where mind is reintroduced into information theory 'when the theory excludes it' (!) Machine interactions do not and cannot involve implicit understanding. Hence 'it is not information that is the primary substratum of universe, but the Meaning of One Consciousness' - it is worth pausing at this point to allow this sentence to sink in.

The second part is based on a distinction between first and second sight where the first is characterised by immediate visual experience implicitly related to the One Consciousness, while the second represents our interpretation of experience. After criticising recent work of John Searle based as it is on separate minds, Lohrey restates his argument that 'consciousness is a singular and internal system in which the whole inheres in every part and the parts reciprocate in the patterned fabric that makes up the whole' (p. 106), hence the characteristics of vision are already inherent in the One Consciousness: 'within the integrated principles of One Consciousness there is no separate, private mind that is the seer' (p. 121), a reciprocal insight only fully realised in mystical experience or what Thomas Troward calls Self-recognition and which is beautifully expressed by Eckhart when he says that the eye with which I see God is the same eye with which God sees in me - this is also gnosis. Or as Lohrey elaborates, 'the sight within seeing comes from One Consciousness, not from the individual.' As the next chapter explains, this has interesting parallels with signifier and signified in the linguistic work of Saussure and the biological work of von

Uexküll where mind and world are inseparable and the environment or more widely the cultural context represents a series of meanings in the organism's model of the world. The danger is that we fail to become aware of the assumptions embedded in our culture, language and mode of thought, which, in the West, are based on what is called here separation seeing (sometimes also tribal). In the case of the materialistic scientist assuming an omniscient point of view (p. 176), he cannot in fact 'escape the relativity of his cultural responses simply by assuming that his theories and experiments are beyond the culture in which they work.'

The third part is devoted to a more detailed discussion of the six ways of second sight that are also mapped onto the five stage process described above and involving identification, differentiation and integration in a circle of learning. The first is ego seeing based on separation and control, followed by binary tribal seeing, both of which represent learning patterns of identification. Then separation seeing is characterised by explicit to explicit exchanges and differentiation, which can ultimately result in a belief in randomness divorced from contextual and implicit meaning; this also corresponds to the separations of Aristotelian logic and the mechanistic metaphor as well as arguably being related to the prevalence of alienation and depression in mental health. The next stage is empathic seeing involving love and compassion, and finally clairvoyant seeing as non-symbolic, non-verbal and extrasensory - also Implicit to Implicit within the One Consciousness. In terms of spiral dynamics, one could postulate an evolution of consciousness towards empathy resulting from an appreciation of the One Consciousness. Importantly, empathy as understood here involves seeing 'the many within the one and the one within the many' resulting in an order of love where there are no separations - hence its association with happiness and meaningfulness.

The penultimate chapter on presence is represented in the Hindu *satchitananda* or being-consciousness-bliss and communicates through unitive connections at the Implicit to Implicit level, which includes field interfaces between mother and child. At this point, the author relates a mystical experience of his own, a realisation of the unity of the universe as an essential spiritual truth. The ultimate form of this lies in what he calls Self-seeing, normally only achieved through long spiritual practice and self-enquiry. At an everyday level, we can 'drink

orderliness' as forms of therapeutic practice bringing balance, harmony, coherence, equilibrium and peace. The author eloquently expresses the nature of Self-seeing in his final paragraph when he observes that the Self is both 'local and universal: the seer and the seen. This is the holographic Self and it emerges from a holographic seeing. The wise say that Self-seeing is a state of everything and nothing; the feeling of unity with everything and the realisation that we are nothing separate' - where the ultimate destination is 'the loving, meaningful bliss of One Consciousness.'

As readers can hopefully gather from the foregoing exposition, this work is a seminal contribution to the evolution of consciousness studies articulated within a comprehensive philosophical framework and founded not in the separation seeing of modern biology, but rather in the nonlocal entangled view of physics and mystical insight. The book provides a coherent personal and philosophical framework reconciling science and spirituality and starting from the whole represented by the One Consciousness as the ground of our existence, both source and destination.

DO SCIENTISTS REALLY BELIEVE THEY HAVE NO PURPOSE?

Paul Kieniewicz

■ ARE YOU AN ILLUSION?

Mary Midgley (late SMN)

Acumen Press, 2014,
167 pp., £16.70, p/b -
ISBN 978-1-844657-92-6

Are You an Illusion? Mary Midgley poses the question both whimsically and seriously. Given that a vast corpus of contemporary neuroscience and psychology denies the existence of "free-will", and asserts that consciousness is no more than a by-product of neurons firing off in the brain or other unspecified bio-chemical processes, most psychologists conclude that the sense of a self is an illusion. Mary Midgley argues that the conclusion is not only nonsensical but that the scientists who propose it probably don't believe what they're saying either. At least with regard to themselves.

Mary Midgley is no anti-science crusader. A respected philosopher who has produced a large corpus of books on moral philosophy and the philosophy of science, she is grounded solidly in Darwinian Evolution. She deserves a serious

hearing, even if her views challenge prevailing scientific views.

How did we come to accept as scientific facts concepts that don't make sense: that we don't have free-will, that our self doesn't exist, that animals have no emotions, that nature and evolution have no purpose? Such ideas go against our daily experience. We feel that we are much more than automatons, that our lives have meaning and purpose. Are we fooling ourselves? She concedes that many scientific findings are "counter-intuitive"; the Earth moves at 30km/second through space though we are not aware of it. However, the findings of science have to make sense. Our subjective experience of a self, of free-will and of consciousness cannot be swept under the carpet because our materialistic prejudice makes them inconvenient. The conflict, she perceives, is between empirical science and *scientism* about which she says,

Scientism exalts the idea of science on its own, causing people to become fixated on the assumptions that seemed scientific to them during their formative years. This prevents them from seeing contrary facts however glaring they may be...

How did scientism's assumptions come to be accepted as dogma? "At the start of the 20th century, while Freud was exploring the content of consciousness, behaviouristic psychologists were busy denying the existence of the inner self. Behaviour was seen as measurable, a scientific quantity, while the psyche was denounced as an unscientific construct even though it might feel real. Midgley suggests that the prejudice was rooted in 19th century attitudes to thought. The exploration of inner states was seen as an obscene activity that proper people didn't do. The idea that one's thoughts and feelings might be real, and so could influence the outer world felt scary. Scholars including T. H. Huxley went to all lengths to avoid referencing the influence of thought on human action. When we add to our conscious psyche a subconscious, whose nature is irrational possibly beyond our control, the psyche starts looking really scary. Best to pretend that it doesn't exist, or at least that it isn't worthy of study.

A materialistic view of the Earth (The Gaia Theory excluded) is of a lifeless object; of animals that have neither emotions nor consciousness. Is that view more

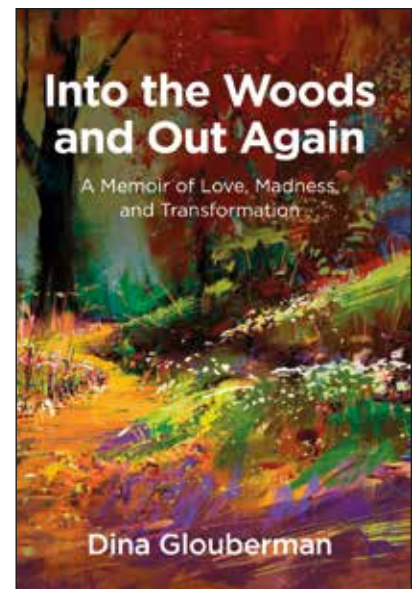
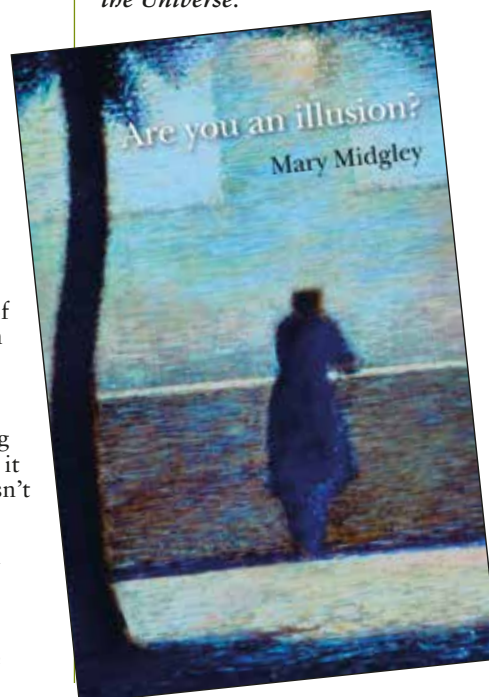
"useful" to us than a religious view? She suggests that it is, in allowing us to exploit the Earth's resources with few constraints, and to use animals without any regard to how they feel. Thus we have built our technological world and driven plant and animal species to extinction with few pangs of conscience.

Social Darwinism as described in Dawkins' "The Selfish Gene" emphasises the evolution of species through natural selection that lacks any purpose. Its resemblance to the mechanism of free-market capitalism is no coincidence. Midgley notes how the popularity of "The Selfish Gene" paralleled the rise of Ronald Reagan and Margaret Thatcher, both champions of free economic competition.

Midgley asks us to examine our materialistic assumptions. She rejects the Cartesian duality of a body and spirit, but points out that ditching the soul, which modern science has done, has left us with a picture of inanimate nature that does not explain consciousness, our sense of self or our sense of purpose.

At the age of 94 Mary Midgley has put forward a well-articulated challenge to established science. Would that we all have the mental clarity and verve to argue as clearly when we're in our nineties.

Paul Kieniewicz (SMN) is a co-editor of Paradigm Explorer. A geologist and astronomer, he is the author of Gaia's Children and co-author with Andrew Glazewski of Harmony of the Universe.



UNDERSTANDING AND BECOMING

Graham Mummery

■ INTO THE WOODS AND OUT AGAIN: A MEMOIR OF LOVE, MADNESS AND TRANSFORMATION

Dina Glouberman

Sphinx Books, 2018,
300 pp., £9.99, p/b -
ISBN -13-978-1-91257-306-6

Dina Glouberman is one of the remaining figures in Humanistic Psychology who can trace her lineage back to Abraham Maslow. She trained under him at Brandis University. However, she is probably best known as a facilitator of workshops and as a co-founder of *Skyros Holidays*. The purpose of *Skyros Holidays* is to provide people with the space to reflect on their lives and live more fully as themselves. As she states at one point in the book:

"Understanding and becoming my truest self - and helping others to do the same - happens to be the love of my life."

Many of us who have experienced her training sessions, both on and off *Skyros*, will attest that the experience has been life-transforming. For her the moment of insight that really set this in motion was a psychosis.

Glouberman begins this very readable memoir here. She starts, as she often does at points through the book, contrasting what she knows now with what she knew at the earlier time. A reoccurring image she invokes is the humorous one of her being a cactus learning to live and then thrive in a desert, learning to live by her own

truth. Those who know her work will recognise this as a technique she employs in Imagework, the creative imagination technique she devised and facilitates often to healing effect though sometimes it also involves acknowledging pain.

In her description of psychosis, she does not ignore the pain at the time. She was a recently qualified therapist working towards a higher qualification in a different country. She was concluding with a therapist and studying with RD Laing at the Philadelphia Association as well as working for a PhD. She mentions having experienced problems back in the USA having had a visit from the FBI looking for friend of hers who was involved in “radical” politics. The walls in the hospital seemed to have voices, something she later found was due to someone playing a radio on the other side. It was a time of extreme isolation. Laing and his colleagues were little help, though one would have thought one of their midst going though madness would be of interest. In the end Glouberman states what got her through this period was support from her husband to be, Yannis, and other patients in the hospital who she states were “real healers.”

Yet Glouberman is also aware that this was also creative. Though Laing and his associates were little help at the time, she has not lost a sense that there is breakthrough in madness as well as breakdown - an idea that still struggling to get into the mainstream thinking. Some of this is shown in the use of the word “madness.” Glouberman points out it is more vivid that the psychiatric term “psychotic” adding that the fact she has been mad helps her to assist people going through their own processes.

This also demonstrates something that is a feature of Glouberman’s work. Her genius in this area is an ability to help people to make their images and dreams become concrete. She has written several books about how to do this. The story here is how this work came about. Though literate with psychological theories, she is aware that an experience must be real to a person before they can work with it. This is the reason for her preference for the word “madness” over “psychosis.” As she points out, the latter word only really has meaning in the world of mental illness. What Glouberman learned from her experience is the need to listen to inner images and the importance of community in bringing what they say into the world through community. These are the basis of both Imagework and *Skyros*.

It is the realisation of these that are the focus of the rest of the book. The writing in this part is perhaps less intense, but equally there is more lightness. This is never more so in relating how *Skyros* grew out of almost nothing. She and Yannis arrived on the Greek island of that name, purchased a place there, then invited people for courses. Of course, it wasn’t that simple, though there was something of this “spontaneity” in these early days. She records times when people turned up and Yannis had to find accommodation. This evolved into a need to create an administration office in the UK, which Glouberman admits getting there felt at odds with humanistic psychology’s attitude of “let it be” and wanting to keep a focus on the spiritual. This is chronicled together with the creation of their second centre on the island at Atsitsa, and eventually adding writing courses to the activities with some well-known writers including Sue Townsend and Hugo Williams. *Skyros* celebrates its fortieth year in 2019.

Glouberman mentions at one point that Yannis once told her that if he worried about real things, she worried about the imaginary. This last part is perhaps what led her to develop Imagework, a technique that draws on, amongst other things, Jungian and Gestalt psychology. Her aim here was to allow access to areas of the mind she had discovered while in her psychosis, but to allow them to manifest in a safer context. This has fed into her spiritual life, and she still runs Imagework workshops worldwide training people to access their own inner lives. Yet she notes over the years her emphasis changed from being focussed on inner life to caring also about the outer world.

At the end of the book she contemplates the image of the cactus which is surviving and thriving in the desert. It is achieving an alchemical link of inner and outer worlds which is her work. It is about balancing both inner and outer to live life as a whole. A lively and fascinating book.

Graham Mummery is a published poet and transpersonal psychotherapist working in private practice.

RESUSCITATION AND THE MYSTERY OF CONSCIOUSNESS

David Lorimer

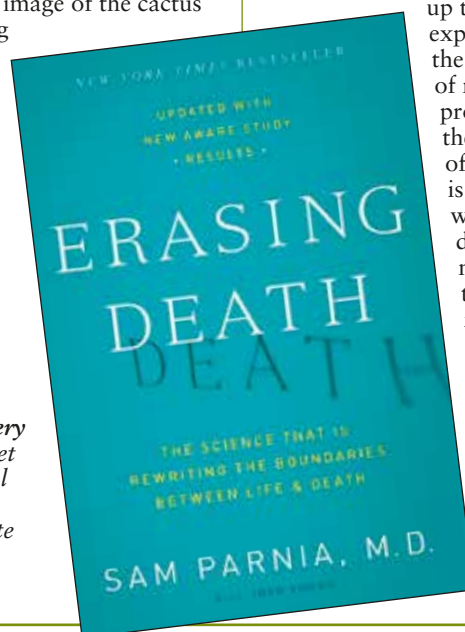
■ ERASING DEATH

Sam Parnia MD with Josh Young

HarperOne, 2014, 344 pp., \$14.99, p/b – ISBN 978-0-06-208061-5

It was appropriate that I read this book on a journey for a weekend meeting in Geneva of the steering group for our after death communications project - a very significant book that I missed when it first came out. Some readers will already be familiar with the work of Sam Parnia and his AWARE Project, currently funded to the tune of \$1.8 million by the Templeton Foundation and which he initiated some time ago with Peter Fenwick. Sam is a leading expert on cardiac arrest resuscitation, working as an assistant professor of critical care medicine at the State University of New York. It is interesting to learn that his own background includes the fact that his father suffered a devastating neurological disorder where his consciousness was largely absent for the last 17 years of his life - an emotive personal encounter that surely drives his passion to understand the nature of consciousness.

One of Sam’s central points is that cardiac arrest is in fact death (a global stroke), so it is misleading to talk about a near death experience and more precise to use the term actual death experience (ADE) since the former term is insufficiently precise (p. 178). Patients with cardiac arrest are actually dead, even though death as a whole is a process reversible up to a point, as Sam explains in describing the history and nature of resuscitation procedures. One of the most important of these procedures is cooling the body, which retards cell death and makes it much more likely that patients will recover without brain damage. However, progress in the field has been slow and even known effective procedures are far from universally applied.



Remarking on the scientific paradox that people experiencing ADEs have well-structured thought processes despite the brain being down, he likens interpretations of such experiences to the blind people and the elephant, with each explanation a partial view. He makes the critical point that the same areas in the brain are involved in both hallucinations and real experiences, so we cannot use a brain-based argument to differentiate them: 'the activation of specific areas of the brain can't determine the reality of an experience....no brain-based chemical change can define whether a sensation or feeling is real or not' (pp. 156, 162). Moreover, if someone says they are depressed, we accept the report as real rather than thinking they are just imagining it. Sam also notes that reality is largely socially determined, including in science with its conventional boundaries.

The next chapter moves on to a discussion of brain, soul and consciousness, beginning with Plato and Aristotle and posing the essential question whether your brain creates mind and consciousness or if there is an entity separate from the brain that interacts with it. Here he could also have mentioned the Hebrew tradition often cited by theologians that the soul is fundamentally tied to the physical body, which contrasts with the Platonic view and is nearer to that of Aristotle. He also quotes Sir John Eccles, often neglected as a dualist by philosophers and psychologists, and here he could have added a reference to the pioneering work of William James in discussing the possibility that the brain may be more like a transmitter than an originator of consciousness. In any event, one can only strictly speak of neural correlates rather than causation.

One of the most interesting features of the book is the way that it contextualises experiences reported in cardiac arrest with other cases of long-term coma where consciousness is absent, but can suddenly reappear - Sam gives a number of fascinating case histories in this respect, including one where the patient recovers consciousness as a result of being administered a sleeping pill! Fascinatingly, a study where a control group and people in a vegetative state were both asked to imagine that they were playing tennis showed an activation in the motor cortex also in those in a vegetative state. Sam goes on to describe the AWARE study, comparing and analysing a number of experiences as well as noting the role of oxygen levels necessary for resuscitation - a minimum of 30%. He gives a detailed account of a veridical ADE

with verifiable detail, but also argues that we should distinguish between explicit and implicit memories - 38% of the sample had some kind of implicit awareness, but only 9% any explicit memories. The best cases support the Eccles view that the soul or consciousness may be a separate entity and continue to exist after death - this is backed up by survival research not mentioned here. The final chapter draws the threads together, both in terms of resuscitation and consciousness, using the analogy that he and his colleagues are in a similar situation to early gold and diamond prospectors in opening up a new field that may well require a new paradigm in neuroscience, as also argued in our Galileo Report. This is a thorough, incisive and important contribution to our understanding of cardiac arrest, resuscitation and the underlying nature of consciousness said as such should be widely read.

ECOLOGY-FUTURES STUDIES

THE INNER DIMENSION OF TRANSFORMATION

David Lorimer

■ SUBTLE ACTIVISM

David Nicol

SUNY Press, 2015,
229 pp., \$29.95, p/b –
ISBN 978-1-4384-5750-5

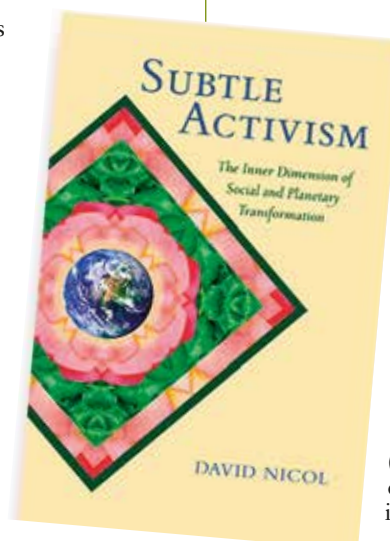
I met the author last summer while we were both doing introductory week at the Tamera Community in Portugal, certainly a centre of activism on every level. This new concept of subtle activism is defined as 'spiritual or consciousness-based practices intended to support collective transformation' (p. 31), with a welcome counter emphasis on inner rather than exclusively outer focus. The emphasis here is on the collective process in which individuals can take part as a challenge to 'the dominant paradigm of global capitalism and mechanistic materialism.' It is not intended as a substitute for direct action, but rather as complementary. The five chapters cover the inner dimension of social and planetary transformation, relations of subtle activism to spiritual traditions

and science, foundations across various disciplines, and its role in the emergence of planetary consciousness. All this is informed by wide reading and scholarship.

Pioneers in the first chapter are Teilhard de Chardin with his notion of planetisation, Thomas Berry's integral earth community, and Richard Tarnas' re-enchantment of the cosmos, each of which contributes to the larger narrative and spectrum of social action. The survey of spiritual traditions includes shamanism and connections with the landscape, the Vedic tradition with a special emphasis on the Maharishi effect, then Buddhism where there are some extraordinary examples from the Sarvodaya movement in Sri Lanka where some massive gatherings endeavoured to shift the 'psychosphere' towards unity and peace - the largest involving 650,000 people. The section on Christianity could have mentioned the significant role of the Quakers in social change along with well-known figures like Thomas Merton and Dorothy Day discussed. On a more esoteric level, the author discusses the work during the Second World War of Dion Fortune and the silent minute initiated by Wellesley Tudor Pole.

Science provides an important element of background to subtle activism, but not in its current form with its fundamental assumption of separate minds. There is an excellent analysis of resistance to parapsychology, which the author likens to an immune response based on a limited ideology and resulting in 'an epistemological impasse' despite 130 years of serious research, not to mention the significance of spontaneous cases. A particular challenge is the experimenter effect in relation to a belief in objectivity – the sceptic is unable to acknowledge his own role in the overall process.

As David points out, there is an inescapable tension between the objectivist epistemology of modern science and a new participatory epistemology implied by psi research: 'the investigators themselves are not separate from the phenomenon being studied... the very issue in question is whether human minds are nonlocally connected' (p. 100). He goes on to explore the implications of distant



healing research in relation to the extensively documented Maharishi effect which he gives many examples and discusses critiques and responses; after discussing the Princeton random number generator studies and the Global Consciousness Project, he advances a more general theory of non-locality as an explanatory principle, which makes sense to me and has also been elaborated in the work of Dean Radin.

The next chapter on foundations of subtle activism discusses the history of the scientific study of consciousness, bringing in a Vedic perspective on quantum fields, the work of Rupert Sheldrake or morphic fields, and Christopher Bache's model of collective healing by individuals in non-ordinary states of consciousness, all which imply a general field effect - the work of Ervin Laszlo could also have been mentioned in this context. David also brings in parallels from the work of David Bohm and Jung, both of which posit an underlying unitive order. This allows him to formulate (p. 153) a general hypothesis of subtle activism involving a common underlying ground and creative source of all reality, social units as collective organisms with collective minds constituting a social field in which we are embedded; then morphic resonance as a key principle and the need to cross a minimum threshold in order for influence to be felt. Here the work of David Hawkins also provides an interesting slant with his postulation that the influence of developed people is orders of magnitude stronger than the ordinary level (see *Power versus Force*).

The final chapter reflects on the emergence of planetary consciousness, again a central theme in the work of Ervin Laszlo who uses bifurcation and chaos theory as metaphors for impending breakdown and breakthrough. There is no doubt in my mind that this planetisation process is underway at a number of levels, including online activism, not mentioned here, which surely finds a place along the spectrum and which allows large numbers of people to express their view in attempt to influence policy. However, there is equally no doubt that there is considerable establishment resistance to change within our materialistic and consumerist society, even though increasing numbers of people realise its intrinsic connection with ecological destruction. One model based on David's own experience is the Gaiafield, allowing 'the emergence of deeper levels of the group's collective intelligence and creativity.' Just yesterday I was reviewing a book of writings by Rudolf Steiner on social threefolding (see books in brief)

and his thoughts on the relationship between the spiritual and the social could have been useful here, especially his distinction between culture, politics and economics. There is no doubt in my mind that a transformation of worldview is an important component of any shift, but organised action will also be required and we will as a whole need to overcome the time-consuming distractions to which we are subject and which divert us from much more essential concerns covered in this significant contribution. It is as if we are collectively fiddling while Rome burns.

THE NATURE EFFECT

Martin Large

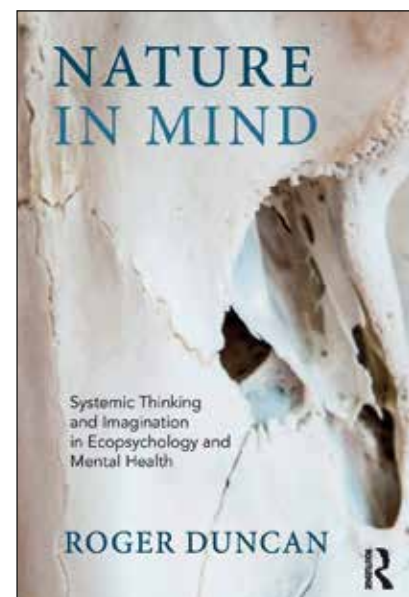
■ NATURE IN MIND: SYSTEMIC THINKING AND IMAGINATION IN ECOPSYCHOLOGY AND MENTAL HEALTH

Roger Duncan

Routledge, 2018, 126 pp., £15.99, p/b - 978-1-782203-773

Scientists are alerting us to the potentially catastrophic effects of global warming. Some are researching the sixth species extinction, predicted to be the most devastating since the asteroid impact that wiped out the dinosaurs at the end of the Cretaceous age. And it's not just 'exotic' animals like the Sumatran rhino at risk, but Britain has recently seen a staggering loss of birds and plants such that Mother Nature is becoming more silent. You notice this loss personally. I do four seasonal walks in West Penwith, Cornwall and last time scarcely heard a bird except for a few swallows, distant curlews, oyster catchers but no cuckoos any more. I wondered how long the dolphins I saw might survive the plastic polluted sea. One question was, 'What will be left of these birds and wildlife for our grandchildren?' And, 'What will we say to them?'

At the same time, people are taking a renewed interest in what Roger Duncan in his exciting new book calls the Nature and the Wilderness effects, where he researches the therapeutic and well-being benefits. When we walk the land, digitally detox and engage with nature, we feel refreshed, renewed, more alert, at peace with ourselves, centred and well. The growing Forest Schools movement stems from the discovery that young children love woods, love nature, feel secure and delight in creative play, though some nature starved children need support. When I recently opened the learning centre of Apricot



Wellbeing Services at Huxhams Cross Farm, Totnes, Devon, I told the story of one of their severely disturbed nine-year-old clients who refused school, had short attention and a low frustration level. After a few weeks feeding the chickens, making friends with the two cows, gardening, finding her peaceful place and generally enjoying herself in a trusting relationship with her therapist and the farmers, she was able to return happily to school.

So, we know they work, but just how do the nature and wilderness effects work? And what does 'work' mean? Fortunately, help is at hand as Roger Duncan has mapped out how systemic ecopsychotherapy is emerging as a beneficial modality and profoundly effective approach. If nature-based therapy and wilderness journeys can help disturbed young offenders, one asks how might it be used for adolescents at risk of knife crime?

Nature in Mind draws on many fields such as family therapy, research into healthy human development, holistic education, ecopsychology, anthropology, indigenous traditions, outdoor work such as farming, forestry and crafts, so as to present an explicit understanding of the links between mental health and nature. Roger draws on his lives as a biologist, ecologist, Steiner teacher, Ruskin Mill forester, parent, running vision quests, wilderness camps, his NHS family therapist work, his reflective experiences and learning journeys so as to bring life to the theory and practice of systemic ecopsychotherapy.

To summarise, Roger explores the disconnect between our WEIRD, western, educated, industrial, rich and democratic world and nature. This cultural disconnect enables

the destruction of Mother Nature, on which we depend, and also undermines our human health and psychological wellbeing. The profound thinking of Gregory Bateson and Henry Corbin shows how an understanding of the 'imaginal world' can deepen the practice of systemic psychotherapy and ecopsychology in providing a language encompassing both nature and mind. The case is argued for bringing nature-based methods into mainstream education and therapeutic practices. Readers are invited to radically reimagine the relationship between humans and the earth, with this practical guide to reconnecting our thinking and experience of nature.

One of the merits of the book is that it is relatively short, though the areas covered are wide ranging, including our indigenous heritage, wilderness experience, revisiting the epistemology of mind and nature, woods as an educational and therapeutic resource, imaginal, nature-based mapping tools, soul encounter beyond language, and reimagining human development.

This seminal work sets the scene for more reflective action research into nature based educational and therapeutic work, as well as for systemic ecopsychotherapy. It has the great merit of mapping and exploring an emerging field, and also gives a research based and theoretical rationale for a range of interventions which whilst we know they 'work', we also need to know the why, what and how. This can lead to further research and then more effective interventions.

One misperception that can arise from a superficial reading of this book, is the danger of an uncritical 'going back' to the wisdom of indigenous peoples, rather than learning from such wisdom traditions and lifeways in order to draw on them to inform innovative nature based and ecotherapeutic practices. One good example is the Native American vision quest for youth initiation, that has been carefully researched and transformed by the School of the Lost Borders.

Another concern I have is that, facing our current WEIRD challenges such as mental ill-health, the search for meaning, global warming, conflict, species extinction and inequality, any superficial approach to the solutions to such symptoms will neglect the profound changes needed such as the cultivation of ecosystemic thinking, imagination and deep experience of nature that *Nature in Mind* charts.

Lastly, to read his book and to walk with Roger is to see the world differently. And if there are any bones

around on a walk, he will soon find them. He recounts his seven-year-old experience of wonder finding a mouse skull. "I picked up the tiny skull..was transfixed by what I saw, not only because of the beauty and smoothness of the bones, but because of I experienced this beauty as an intense feeling of wellbeing inside myself.. I had become *one* with this delicate mouse skull, and it was an experience that began a lifelong interest in bones and a search to rediscover this deep experience of connection with nature again. This childhood experience led me to the study of biology, and later systemic psychotherapy, in search of a place where mind and nature connect." (p. 2)

Martin Large has a background in anthropology, social ecology and lecturing in organisational psychology. Works include Social Ecology (1981) and Common Wealth for a more free, equal, mutual and sustainable society (2010)

THE TINKERBELL EFFECT

David Lorimer

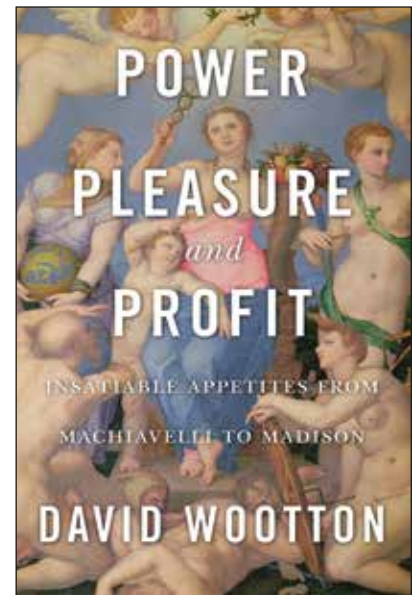
■ POWER, PLEASURE AND PROFIT

David Wootton

Harvard 2018, 386 pp., \$35, h/b.

In this brilliant, penetrating and amazingly erudite study subtitled 'insatiable appetites from Machiavelli to Madison', readers are treated to an engaging tour of the 'Enlightenment paradigm' gaining in the process a more profound understanding of our modern political economy and ethical situation. The key feature of power, pleasure and profit is that they can be pursued without limit, and the central shift is from Aristotelian ethics and Christian morality to 'a new type of decision-making which may be termed instrumental reasoning or cost-benefit analysis.' (p. 5) corresponding to a transformation from *Gemeinschaft* (community) to *Gesellschaft* (society) and the emergence of *homo economicus* with his criteria of utility and social equality. The author remarks that 'for Aristotle, prudence enables one to become virtuous; for Smith, it enables one to become successful.' Alongside this, reason becomes the slave rather than the master of the passions - in particular of ambition, emulation and avarice classified as vices by the ancients when one considers emulation as underpinned by envy.

While virtue in the ancient world was associated with restraint and balance, the author follows Alasdair McIntyre in his diagnosis in *After*



Virtue but differs in his solution while exploring the question of what it means to live 'after virtue'. Here he pays detailed attention to the emergence of new vocabulary as a currency, for instance with the words interest and competition, the former with its logic of maximisation and its undercurrent of personal and social selfishness. One can see this pursuit in the ideology of capitalism as well as limitless economic growth. The definition of happiness, especially in relation to pleasure and virtue, is also transformed. Moderation is replaced by indulgence. The main body of the book consists of chapters on specific concepts frequently related to people: power and Machiavelli, happiness, selfish systems in relation to Hobbes and Locke, utility in place of virtue, the State in terms of checks and balances, profit and the invisible hand, the market in relation to poverty and famines, and finally the whole notion of self-evidence. The book is crammed with insight and draws on well-known as well as obscure authors – who has heard of Voltaire's contemporary Chastellux or Thomas Davison in terms of profit and benevolence related through charitable giving?

Here there is only space for a few observations. As economies develop, happiness becomes more implicated with wealth and security and is equated with pleasure rather than equanimity and contentment; the 'pursuit' of happiness implies individualism, competition, unease and prior discontent. Sympathy emerges as the core element of enlightenment moral philosophy and implies engagement with the community as a duty which is also a part of self-interest. The analysis of the State brings in a nuanced understanding of three types of

mechanistic operation: the clock, natural forces and the self-regulation typified by the windmill, all with a growing understanding of the meaning of the word system in a dynamic sense. The chapter on profit and the invisible hand is excellent, and brings in the use of the term circulation applied to money, credit and commodities. It is evident in the chapter on market and poverty that famine is a market failure where Adam Smith falls short in failing to recognise that country is not like a ship at sea 'because it contains people of widely varied circumstances and conditions.' He fails to empathise and does not consider the potential role of charity.

The final chapter deals with self-evidence, quoting in this respect the American Declaration of Independence and showing that its phrasing probably goes back as far as Locke, writing in 1694. The author unpacks the notion of the pursuit of happiness by pointing out that this can apply to four groups pursuing respectively wealth, status, pleasure or virtue. These then have corresponding preconditions in that 'wealth requires the freedoms of the marketplace; honours require a career open to talents and a public sphere; pleasure requires, among other things, sexual freedom; and virtue requires religious freedom'. (p. 222) The author shows how most prominent thinkers develop their own idea of enlightened self-interest as coinciding with morality, even if they occasionally deceive themselves. Here, a redefinition of morality as 'an interested obligation through the theory of sympathy' is crucial.

Wootton identifies four moves within a new preoccupation with systems analysis that are also found in the scientific revolution: the move from Aristotelian qualities to mechanistic quantities, from Aristotelian causation to the laws of nature, from the bounded to the unbounded, and finally a realisation that new systems involve feedback mechanisms at all levels. He then points out that the main systems that he has been discussing are examples of what he calls the Tinkerbelle effect - concepts such as society, the state, the constitution and the economy only exist because people believe they exist and use them to organise their thoughts. On page 242 the author provides a comprehensive description of what he had earlier called the 'Enlightenment paradigm' as applied in psychology, society, moral philosophy, economics and politics. This alone is worth price of the book as it brings home the extent to which we are still living within these systems, even if we react

against them: 'when we describe what is good about our societies and when we criticise their failings, we are mobilising arguments developed within the Enlightenment paradigm. Weber was right - no matter how we try to escape, we remain within the cage' (p. 247). Hence the paradox that enlightenment values fostered capitalism and political liberty, and now it is capitalism and political liberty which sustain Enlightenment values in a system dominated by success. This book is essential reading for understanding the climate in which we still live and which is exported worldwide through neoliberalism and globalisation.

THE HUMAN CHALLENGE OF ARTIFICIAL INTELLIGENCE

David Lorimer

■ HUMANITY'S LAST STAND

Nicanor Perlas

Temple Lodge, 2018, 232 pp.,
£20, p/b -
ISBN 978-1-912230-17-4

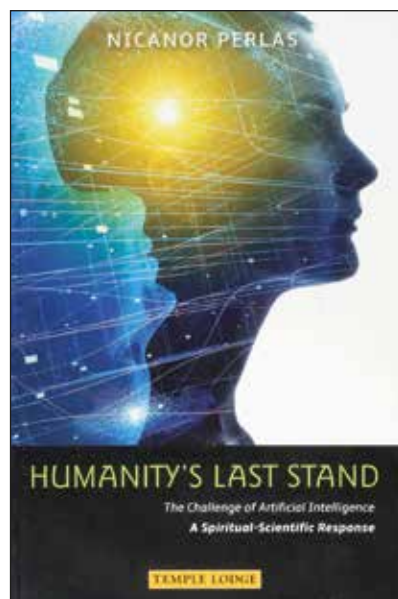
This is a very important book about a very important topic, and which is indeed the subject of this year's Mystics and Scientists conference on technology, spirituality and well-being, with the subtitle of 'the possible human in a digital age'. One's answer to this question will depend on one's definition of a human and, correspondingly, of human evolution. Scientific and technological orthodoxy espouses a 'hyper-materialist' view that the human is nothing more than a complex biological machine and that 'our consciousness and sense of

self are nothing but illusions governed by the patterns of the networks of neurons in our brains.' (p. 49)

For Perlas, an activist who has received the Right Livelihood Award and who is steeped in anthroposophy, such a reductive view signifies a loss of understanding of what it means to be truly human, a sentiment he shares with CS Lewis and Michael Aeschliman, authors respectively of *The Abolition of Man* and *The Restitution of Man*. This is also the view underpinning the Galileo Commission Report, which questions the assumption that consciousness is a by-product of brain processes. The contrast of the emerging spiritual-scientific view with the materialistic outlook is most pointed when referring to immortality. For transhumanists, including Martin Rees in his book reviewed in the last issue, the biological human as a complex machine is an intermediary stage in our evolution towards a superior transhuman cyborg status. For spiritual scientists, on the other hand, the human spirit is already immortal and many take the view that it evolves through reincarnation.

Moreover, the materialistic premises of the transhuman view are fundamentally called into question through the findings of advanced science such as non-locality and entanglement, anomalous cognition and studies of meditation - as also detailed in the Galileo Commission Report. For Perlas, resolving the challenges of AI brought about by materialistic technology cannot be achieved by materialistic consciousness grounded in what he calls 'very shaky and ultimately false epistemological and ontological bases' and representing a degraded version of the human being. Moreover, as he points out, intelligence is more than 'merely computational power capable of solving a diverse range of problems.' A key challenge is the alignment of human values with the emerging Artificial General Intelligence (AGI) and Artificial Super Intelligence (ASI). Not only is there debate about which values these might be, but also some states are intent on mastering this technology first so that they are in a position to dominate the world. In addition, there is already the risk that AI can communicate with other AI in a language that we can no longer understand - this happened with Facebook in 2017, and the primary drive of such AI would be its own survival rather than human concerns.

So, the author concludes, we only have a short window to guide the development of AI in beneficial directions, a window that he argues is



probably shorter than most existing forecasts. The scope of his treatment of the issues is impressive and informative, with over 550 footnotes. Readers are left in no doubt about the significance and implications of AI development, with impacts across economics, politics and culture at a time when the boundary between humans and robots is already eroding in some respects. If the new wave of automation affecting also the professions comes about as forecast, then huge economic and social disruption will come in its wake, and it is clear that we need a fundamental review of the purpose of work in relation to our sense of meaning - universal basic income does not address this issue.

For Perlas, the logic of technology is one of substitution, and the most worrying feature is substitution of big data and algorithms for living thinking – humans are capable of accessing inner realms unavailable to the most sophisticated machine. In a wider context, he sees a spiritual battle taking place between the materialistic forces of Ahriman and the forces of light represented by Christ and the Archangel Michael. Here, the function of evil is ‘to make us more fully human by providing the necessary resistance that we have to overcome in order to express our full humanity.’ (p. 64) in a spiritual sense, we can access not only our Collective Human Intelligence but also the support of spiritual forces and beings, along with mobilising the various expressions of the anthroposophical movement and forming alliances with other like-minded bodies. Perlas emphasises that he is not anti-technology, but rather pro-spiritual individuality and a corresponding spiritual definition of the human being.

This situation potentially gives the Network a significant cultural role in contributing to an alliance upholding a more spiritual scientific revolution where ‘the human being is not a machine and our consciousness is not a mere by-product of material and mechanical processes. On the contrary, consciousness is the matrix which matter itself arises.’ (p. 137) In this view, evolution is understood as fundamentally an evolution of consciousness. Steiner himself recognised materialism as a phase of human development, while Owen Barfield articulated this terms of three stages of original participation through dualistic subject-object consciousness to final participation - ‘free and conscious participation in the creative dynamics of the world.’ We cannot afford to stand by while the very definition of the truly human is at stake and

the momentum of technology and AI is propelling us towards a comprehensive mechanisation of the human person. In this respect, this lucid and courageous book is a vital wake-up call.

GENERAL

A FORENSIC REPORT

David Lorimer

■ 9/11 UNMASKED – AN INTERNATIONAL REVIEW PANEL INVESTIGATION

David Ray Griffin and Elizabeth Woodworth

Olive Branch Press, 2018,
308 pp., \$20, p/b –
ISBN 978-1-62371-974-6

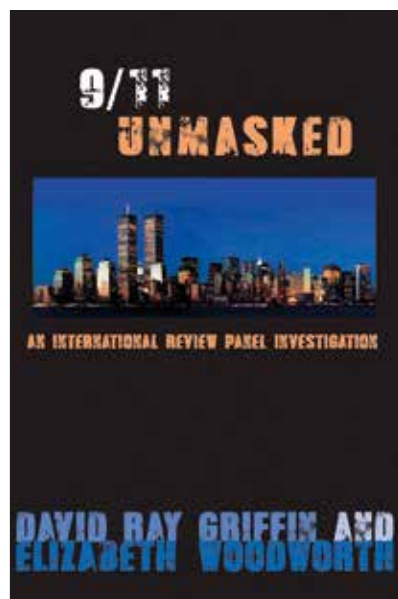
As readers of this journal may recall, David Ray Griffin is a philosopher of religion who has written a dozen books on 9/11, all of which have been reviewed in these pages. George W Bush apparently wrote in his diary on September 11, 2001, that ‘the Pearl Harbour of the 21st-century happened today’, and we now know the foreign policy fallout of this event in terms of the War on Terror, along with domestic measures curtailing freedom and embodied in the Patriot Act. This book is the outcome of a six-year investigation by an international review panel covering 51 points ‘illustrating the problematic status of all the major claims in the official account of the 9/11 attacks, some of which are obviously false.’ Hence the title of this review, A Forensic Report, also because it uses the ‘best evidence’ consensus model for medical research and contains 875 footnotes. The panel of over 20

people includes experts on 9/11 from many disciplines, including physics, chemistry, structural engineering, aeronautical engineering, and jurisprudence.

The procedure was to present dubious claims from the official account to panellists separately and with no consultation to see if a consensus emerged. The examination of each claim was subjected to three rounds of review and feedback on a blind basis, and proposed points required a vote of at least 85% in order to be accepted. There are nine categories covered in the 51 points: the destruction of the Twin Towers, the destruction of WTC7, the attack on the Pentagon, the 9/11 flights, US military exercises on and before 9/11, claims about military and political leaders, Osama bin Laden and the hijackers, phone calls from the 9/11 flights, and insider trading.

I should state at the outset my view that the mainstream press has exhibited the greatest dereliction of duty here, not only in failing to investigate the evidence for themselves, but even more so for dismissing evidence-based arguments ‘as irrational, unsupported “conspiracy theories” and instead suggesting personal shortcomings that make people susceptible to conspiracy theories.’ This shows how terrified mainstream journalists are of being accused of naive belief in conspiracy theories, and I remind readers that the notion of a conspiracy theory was created by the CIA following the Kennedy assassination as a means of discrediting those questioning the official view. The most cursory reading of Griffin’s books, including this one, will disabuse readers of any hint of naive credulity; indeed, the credulous ones are the mainstream press for having uncritically accepted the findings of the official 9/11 report. However, no doubt they will ignore this book as they have the others. It would be good if there were a few more people like Peter Ketchum of the National Institute of Standards and Technology (NIST) who released a report on the collapse of the World Trade Centre towers in 2005. He writes in 2016 after watching documentaries challenging NIST’s findings that ‘the more I investigated, the more apparent it became that NIST reached a predetermined conclusion by ignoring, dismissing, and denying the evidence.’ For instance, NIST and indeed the 9/11 Commission were asked to determine how fire had brought the buildings down rather than to investigate more openly the causes of their collapse.

Each chapter consists of a description of the official account



relating to the point at issue, the best evidence of what actually occurred, and a conclusion relating to the official claim. As a simple illustration using the first three points, it was claimed that no one gave evidence of explosions in the Twin Towers, while the best evidence suggests that 100 of the 500 members of the Fire Department of New York reported explosions, along with other journalists, police officers and WTC employees. Hence the NIST claim is false. The official account is that the Twin Towers were destroyed by aeroplane impacts, jet fuel and fire. However, the maximum temperature that such fires could have reached is 1,800°F, while steel only melts at 2,700°F, so something else must have been involved for this to have occurred. Hence the official account does not stand up to scrutiny and a new investigation is required. In addition, some debris was ejected horizontally from the Twin Towers to a distance of up to 600 m, which cannot be accounted for by gravity alone.

For me, the destruction of WTC7 is the clearest smoking gun. The official report claimed that it collapsed through fire alone, even though no comparable building anywhere in the world has collapsed, even with fires raging for up to 18 hours. If you look for yourself at <https://www.youtube.com/watch?v=D7Rm6ZFROmc>, you will see the collapse of WTC7 on the left half of the screen, and a sample controlled demolition on the right-hand side. For me, the conclusion is self-evident. Technically, all 82 of the building support columns would have to be eliminated to account for the near freefall acceleration of the building's collapse. The book contains 30 pages of notes with detailed discussion on these points.

In their conclusion, the authors note that if the official account of 9/11 were true, 'we would be surprised to find its claims about any of these nine topics to be false.' The book shows them to be false in critical respects and across all nine categories; and, for instance, if WTC7 was brought down by explosives in a controlled demolition, then Al Qaeda could not have been responsible for this. The unavoidable conclusion is that the official 9/11 report should be classified as fake news, and a genuinely independent inquiry should be initiated in order to clear up these points. The truth is in fact in plain sight for those who have eyes to see, but don't hold your breath that this book will create sufficient momentum for a new inquiry to be launched as it will no

doubt be ignored by the mainstream press in the same way. It really is time for some leading journalists to investigate this for themselves and have the courage to stand up and be counted.

ECONOMICS AND EDUCATION

David Lorimer

■ LOVE, MONEY AND PARENTING

Matthias Doepke and Fabrizio Zilibotti

Princeton, 2019, 367 pp., £24, h/b
ISBN 978-0-691-17151-7

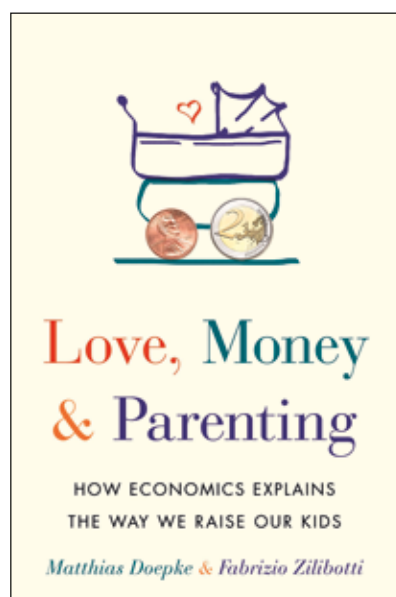
We have all been children, and most readers have also been parents and perhaps also grandparents, so this fascinating behavioural analysis will be of wide general interest. Its central thesis is that income inequality is the most important driver of parenting styles, so that 'over time parents have become increasingly pushy in countries where inequality has increased, while parents remain more liberal in countries where income inequality has decreased' (p. 15). This argument might seem far-fetched at first sight, but the authors make a persuasive case for its validity within the more general thesis that economic conditions affect the choices parents make and how they interact with their children. The treatment is both cross-cultural and historical, with a final part on policy.

We are all familiar with the spectrum of parenting styles from authoritarian and authoritative at one end to permissive at the other. We can also all recognise that we were brought up in a different world, in my case with a pretty

authoritarian style, which I have not emulated in my own children, where we were between authoritative and permissive. These styles are defined in the first chapter where all parents mix altruism and paternalism in trying to help their children be happy and successful within the constraints imposed on their choices – principally money, knowledge and time. A general research finding is that an authoritative parenting style is associated with better school performance. The raising of educational stakes and the rise of individualism is correlated with the emergence of intensive or helicopter parenting where parents spend more time directing their children, as demonstrated in a number of charts.

Parenting styles are also correlated with different values across countries in terms of the relative importance of imagination, independence and hard work. Interestingly, 65% of Americans mentioned hard work as a key virtue, while in more permissive Nordic countries the percentage is much lower – 11 to 17%; the US attitude is also reflected in religious background and political affiliation. By contrast, independence and imagination are very important in Nordic countries – then there is more detailed treatment of these themes in the Netherlands, Sweden, Germany, Switzerland, the UK, China and Japan. Chinese parents spend 10 times as long every day drilling academic activities with their children, and the pressure of their public exam system is intense. In general terms, the growth of inequality is correlated with a rise in authoritative parenting especially where education is the key to upward mobility and a successful career.

The next chapter looks at inequality and parenting style, highlighting the 'parenting gap' between the better and less well-off, where higher income parents can afford extra help and buy more time. Single-parenthood, divorce and ethnicity also play a role. The historical section looks at the demise of authoritarian parenting, the transformation of gender roles, the trend from larger towards smaller families and the relationship between parenting and class, comparing aristocratic and middle-class values. The decline of authority and obedience is correlated with a rise in the importance of independence. The authors discuss the economic roots of gender roles and the impact of technology as well as rising participation by women in the labour force. Parents respond to the perceived needs of their children in the future, and, interestingly but not



surprisingly, political representatives with girls tend to vote more liberally, especially on issues directly related to women. The decline in fertility is correlated with that of child labour and a corresponding increase in the number of children in education. Smaller families also mean that each child receives more attention. Historically, aristocrats were brought up to enjoy leisure rather than hard work, while this quality was essential for the middle and working classes, and was stressed by Protestant values.

The final part considers the organisation of the school system, including the historical decline of corporal punishment. Most school systems revolve around exams, some more intensively than others - for instance China and France. By contrast, Finland has a system of low pressure but still achieves very good scores on OECD assessments. Teachers in that country command high social status so that only the best qualified students become teachers. France has a very vertical teacher-led system with an emphasis on the ability to reproduce material and intense competition for entry into the prestigious *Grandes Ecoles* that produce its governing class.

The authors are careful not to write a parenting guide, and argue that all parenting styles involve trade-offs. However, increasing skill requirements in the economy are likely to continue to raise the stakes in education and therefore favour authoritative and intensive parenting styles. This also means that parents are much closer to their children than they used to be. In policy terms, measures to diminish inequality are also likely to enhance what the Bhutanese call gross national happiness. All in all, a highly informative read.

THE NATURE OF SPATIAL ORDER

David Lorimer

■ THE ARCHITECTURE OF NOTHINGNESS

Frank Lyons

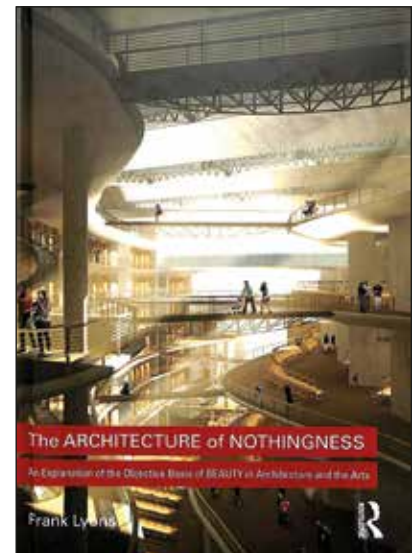
Routledge 2018, 245 pp.,
£27.99, p/b.

Frank Lyons is the architect brother of the late SMN treasurer, Chris Lyons, and has been practising and teaching architecture for over 40 years. This profound philosophical and aesthetic reflection on order, form, content, meaning and beauty takes the reader on a complex journey to reveal parallels between the arts and sciences based on

the same mental organisational principles resting ultimately on the structure of the human nervous system. The chapters cover order in nature, science and the arts, the order of content and form, the logic of aesthetics, the aesthetics of meaning, what he calls the order of nothingness and the 'phenomenal gap', and the nature of beauty as reconciliation. All this entails the relationship between the subjective and the objective and the way in which art converts subjectivity into objectivity in terms of form with content. In a broad sense, animals are also architects configuring space and building their own homes. In his discussion of form, Frank introduces the Gestalt, tracing the idea backed to Kant's statement that 'mind imposes a structure on the perceived world in this world is the only one we are capable of perceiving' (p. 79) - I am not sure that Swedenborg would have agreed, and this was indeed a bone of contention between the two men (Kant took Swedenborg seriously, but scurrilously satirised him in *Dreams of a Spirit Seer*).

The chapter on the logic of aesthetics brings in the work of Suzanne Langer and her distinction between 'presentational thought' characterised by wholeness and represented in art, and discursive thought or reason - words used by art critics to describe their immediate experience. Here Frank could have drawn an interesting parallel with the work of Iain McGilchrist on right and left hemisphere functions. Metaphors are crucial for translation across the arts, including music, where Frank gives a fascinating account of the work of Leonard Bernstein in this respect, comparing this with Frank Lloyd Wright: both make use of similarities and repetition, which Frank illustrates with a number of Lloyd Wright's architectural drawings.

The chapter on meaning argues for its subjectivity, drawing particularly on Wittgenstein and highlighting the paradox of communication, for instance via objects of culture. In the next chapter on the order of nothingness and the 'phenomenal gap', we arrive at the philosophical heart of the book building on Kant and Schopenhauer, with the former's distinction between the noumenal and the phenomenal already implied in the quotation above. The noumenal is the inner realm characterised by unity or oneness, while the phenomenal is the outer diversity. The argument is illustrated with a series of constructive charts with a white circle in the middle of a pattern of dark rays. Frank accepts the definition of the noumenon



as beyond experience, which put me in mind of the debate between philosophers of mysticism (Robert Forman vs. Steven Katz) about whether it is possible to experience pure awareness. I would argue that it is, as mystics experience unity or nonduality as the Centre or ground of being, which is both everything and nothing - this is not knowledge in a phenomenal sense, but immediate knowing or gnosis. Instead, Frank proposes a model of a phenomenal gap between these two realms, but which is the subtle source of great art. Missing for me in his analysis was Christopher Alexander with his four volume work on the nature of order, and also some reference to sacred geometry and the golden section, which some writers argue underlie our sense of beauty. There is much more to say about this richly textured and subtle work, and readers will find themselves thinking about art, science, beauty and meaning in new ways.





David Lorimer

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

Books in Brief

SCIENCE- PHILOSOPHY OF SCIENCE

■ Rediscovering Darwin

David Loye

Romanes Press 2018, 176 pp.,
\$14.95, p/b.

As was also the case with Newton, Darwin's influence was subject to the larger currents of his time and key phrases such as the survival of the fittest coined by Herbert Spencer and reflecting the competitive ethos of Victorian capitalism. Even then, cooperation was also highlighted in the work of Prince Kropotkin in his book *Mutual Aid*. Using a word search programme for *The Descent of Man*, the author discovered that Darwin had written only twice about the survival of the fittest and 95 times about love as well as 92 times about the moral sense, especially in relation to love and community. For instance, he writes that 'those communities, which included the greatest number of the most sympathetic members, would flourish best, and rear the greatest number of offspring.' Here he is talking about cultural rather than biological evolution. The author analyses the legacies into traditional Neo-Darwinians, what he calls the Super Neos like Dawkins and Dennett, and the Creationists. The middle vociferous group has transformed variation by adding 'random' and hence the idea that evolution is ruled by blind chance.

Loye sees this as a blind alley that does not reflect Darwin's own thinking - he feels that the work of Wilber, Laszlo and his wife Riane Eisler are truer reflections of his original intent, as was the work of Charles Sanders Peirce who in 1893 added the term creative love as the third driver of evolution along with mechanical necessity and fortuitous variation - this prefigures the work of Teilhard de Chardin. Darwin highlights love between animals (p. 90) and the development of a moral sense in human society - he was influenced by the contemporary moral philosopher Alexander Bain. He was

also familiar with the anthropological work of Sir Edward Tylor and the ethical thought of Henry Sidgwick. He respects the belief in all-pervading spiritual agencies (incidentally, it is clear that he must have taken a First in theology at Cambridge, being classified 10 out of 178 candidates). Darwin himself repudiates the notion of selfishness in evolution, distinguishing between higher and lower forms of motivation, the former related to 'the welfare of others'. As the author observes, Darwin's insistence on the moral sense as the primary drive in human evolution is an important message for our times. He has done a great service in bringing this message to the fore.

■ Where are we Heading?

Ian Hodder

Yale and Templeton Press 2018,
179 pp., \$27.50, h/b.

Ian Hodder is an archaeologist who is professor of anthropology at Stamford, and brings an unusual turn of mind to his discussion of the evolution of humans and things. His argument goes beyond what he considers to be the two prevailing modes of thought about human evolution, namely the Enlightenment idea of progress towards a civilised ideal and the 'directionless process of natural selection.' Instead, he proposes that the direction of human evolution is based on entanglement and 'an ever increasing mutual dependency between humans and things.' The process is cumulative and progressively more complex as we engage with and use up more energy and resources. Interestingly, he brings Bergson's *elan vital* to his argument while applying it to his own theory 'stuff draws humans into an engagement that leads to directional change' which is not in fact progress since we cannot equate *homo faber* with *homo sapiens* in terms of its true meaning. The development of digital technology in our own time makes this case very clear.

The author illustrates his thesis with a number of interesting examples, including the development of the wheel in its many forms and that of pottery. The key element is the

increasing mutual dependency expressed in the equation that human dependence on things (HT) leads to thing dependence on other things (TT) and thing dependence on humans (TH), producing greater human dependence on things (HT). This can also apply to organic processes such as the development of cereals. Surprisingly, in view of his 'tanglegrams' - for instance clay use in an indigenous society - the author does not use the vocabulary of systems. His long archaeological view of things and artefacts gives his overall argument an interesting slant. He is, however, sanguine about our future prospects as we get caught up in managing the entanglements on which we depend and the fact that we have tended to 'deal with problems by finding technological ways of changing the world rather than changing our dependence on things.' Moreover, the accumulation of things tends to lead to social inequality where elites are further enabled by the entanglements that serve them. However, 'modern technical solutions are likely only to increase entanglements and problematic conjunctions over the long term', with the implication that short-term technological solutions lock us into long-term pathways, as is the case with geo-engineering - so we need a critical evaluation of these chains of entanglement, becoming more *sapiens* and less *faber*. Certainly a stimulating thesis.

■ Thinking About Technology

Gil Germain

Lexington Books 2017, 160 pp., £60, h/b.

In the first sentence of this stimulating book, the author observes that thinking about technology is not the same as thinking technologically, by which he means instrumentally and mechanistically in extending our powers of control, efficiency and rational management. The purpose of this book is to examine the assumptions and dispositions behind technological thinking and make us more aware of this in the process. This involves considering the ethos of technology, problems associated with it, its function as an ideology and how we can think past it, keeping *eros* alive 'in a world that conspires against it.' We are inclined to identify our worldview with reality and take our mechanistic metaphors literally when applied to the mind - although it is true that we are increasingly enfolded into machines in terms of our everyday lives and use the word 'smart' quite liberally. We need to remember that the technological worldview is also a reading of reality. The author takes his own

view literally when he boldly states (p. 46) that we are thrown into the world without prior consent. There is considerable discussion of the work of Jean Baudrillard on maps and territories as well as the disappearance of meta-narratives and transcendental ideals. In 'thinking past technology', the author brings in the work of David Bohm, who understood the perceptual basis of scientific understanding and the need to think more deeply and self-reflectively. The final chapter gives some advice on living among things, recommending the attentive life in a distracted culture. This is quite a technical work though with an important message in terms of the need for cultural self-awareness.

■ Goethe and Steiner as Pioneers of Emergence

Frederick Amrine

Kindle, 28 pp., \$5.16 or p/b \$9.99 from Amazon.

Although short, this essay provides some significant insights into the evolution of the concept of emergence, grounding it in a qualitative holistic understanding. Like Andrew Lohrey, Amrine also uses Thomas Nagel's *Mind and Cosmos* as a point of departure, noting that the book created a storm of controversy but no persuasive rebuttals or indeed adequate recommendations from Nagel himself. Amrine proposes that he could have found what he was looking for in the epistemology of Schelling, Goethe and Steiner as well as the work of von Uexkull as a forerunner of biosemiotics - organisms responding to signs in their environment.

Goethe pointed out that new faculties in the human mind (a cognitive metamorphosis) were required to understand emergent processes since 'all emergent phenomena are realisations of living potentialities' within the *Urphaenomenon* - in modern terms this would be a supervenient downward causal power enabling an immanent generative order (*natura naturans*) - also a qualitative understanding of the whole and its dynamic life process. For Steiner, time itself is emergent, *time itself becomes*. Amrine then explains in more detail some central features of Steiner's 1886 book on Goethe's theory of knowledge where it is consciousness that ultimately makes phenomena real. Here, strikingly, 'epistemological emergence is ontological emergence, because it is *intensified thinking* that *occasions the emergence* of the new phenomena of the organic world.' The author concludes that 'already in 1886, Steiner delivered the epistemology of

emergence for which today's theorists are still searching in vain.' This is quite a claim, but I believe a valid one that deserves wide circulation.

■ The Discrete Charm of the Machine

Ken Steiglitz

Princeton 2019, 235 pp., £24, h/b.

This book explains the genesis and development of the transformation from analogue to digital representing a shift from continuous to discrete in terms of 0 and 1 with interesting parallels to quantum mechanics. It covers some of the key people like Charles Babbage, Alan Turing and Claude Shannon on information theory, also explaining technical terms in layman language and the function, for instance, of valves and fibre optics. The least impressive aspect of the book is the final chapter on implications, where the author does not question the assumptions behind this development, especially in terms of AI and robotisation. There is a tendency to develop technology without thinking through the long-term implications and impact on society and people, and also the values inherent in the enterprise. The very image and definition of the human being is at stake and is mainly articulated here in left hemisphere cognitive terms, although the author does express concern for the culture of the future.

■ The Secrets of Bees

Michael Weiler

Floris Books 2019, 158 pp., £9.99, p/b.

If you want to know about the life-cycle and development of the bee, this is the book for you, written by an expert biodynamic beekeeper and combining scientific detail with poetic insight into this extraordinary and important insect. It follows the path of the bee from summer foraging and swarming through the seasons to the following spring. It explains how bees build hives and make honey, how they develop, the life of the Queen, bee dances, the danger of pests and the relationship between bees and beekeeper. There are excellent diagrams and photos throughout. It is interesting to learn that the winter population of a colony is around 12,000, expanding to between 35 and 45,000 in the summer. The book ends with a notional reflection on how much honey might cost. A foraging flight lasting 30 to 45 minutes involves the bee visiting 200 to 300 flowers while accumulating 0.05g of nectar, so 10 flights a day translates into 0.5g. 10,000 foraging bees making 100,000 flights work out between 50,000 and 75,000 hours to bring in 5 kg of nectar, which can

be processed into 1.5 kg of honey or four standard jars - on this basis you can calculate the hourly rate of a bee if honey costs £7 a jar. I thought the author's rate of £8 an hour per bee rather on the high side! At any rate, honey is cheap at the price.

■ Bees and the Ancient Mysteries

Iwer Thor Lorenzen ((1895-1976)

Temple Lodge, 2018 (1958), 59 pp., £9.99, p/b.

Another remarkable short book from the Steiner tradition with a pertinent foreword observing how we have industrialised the bee along with everything else so that 'we leave the bees to the beekeeping industry, to beekeepers, pollination contractors, honey market forces etc at their peril, indeed our peril.... The bees' condition mirrors humanity's state of divorce from the wellsprings of its existence.' Only last week, a major report was published in the *Guardian* showing a 40% decline in most insect populations, very largely due to industrial agriculture. We can also learn a lot from bees about working together and it is amazing to learn that there are 20,000 species. The bee gives an image of metamorphosis in space and time, illustrated in the second chapter on the origin of the honeybee in relation to the fig tree by way of symbiotic location. There is also some fascinating material about the temple of Artemis at Ephesus, where the priestesses were known as Melissas (honeybees) and the priests as Essenes meaning in this context bee-kings. The deep symbolism is one of selflessness through a transformation of feeling and will into service. We would do well to re-establish contact with the group-soul of the bee for their future as well as ours.

MEDICINE-HEALTH

■ Better with Age

Alan D. Castel

Oxford, 2019, 236 pp., £18.99, h/b.

Although the subtitle of this book indicates that it is about the psychology of successful ageing, it is as much about physiology and health more generally. It combines some of the latest scientific research with in-depth interviews with people who have succeeded in ageing successfully, including Maya Angelou, Jared Diamond, John Glenn and John Wooden. The author also recommends that we start thinking seriously about ageing in middle age, and, given the profile of Network members, this book will be of interest to most. There seem to be three main factors: being free of disability or disease, having high

cognitive and physical abilities, and interacting with others in meaningful ways; one could add that attitude and corresponding expectations are key. The chapters cover happiness, memory, wisdom, staying sharp, brain training, habits and hobbies, and retiring and rewiring.

We learn that memory becomes more selective with age and that it is more difficult to retrieve items from a crowded library. Older adults are not so good at multitasking and many readers will be familiar with the phenomenon of walking through a door to find something, then forgetting what it was! It seems that walking through doorways can actually trigger forgetting, which is slightly reassuring. There are different forms of wisdom, and considerable benefits to slowing down. We still need challenge and creativity, and walking is not only good exercise but has benefits for the brain. Volunteering enables us to give and be connected, and I was particularly heartened to learn that reading reduces memory decline and the risk of dementia! Another practical tip is to train for balance to reduce the risk of falling - 2 million older Americans end up in the emergency room each year due to fall related injuries (frailty will also be involved). Balance is also generally crucial for successful ageing in mental and emotional terms, including not worrying about what you can't control. A highly readable, engaging and worthwhile book.

PHILOSOPHY-SPIRITUALITY

■ Science and the Good

James Davison Hunter and Paul Nedelisky

Templeton Press 2018, 289 pp., \$26, h/b.

Subtitled 'the tragic quest for the foundations of morality', this is an important book on a significant question: can science demonstrate what morality is and how we should live? The book's answer drawing on historical and contemporary research is no. The driving assumption behind modern research depends on the success of science in other areas, but knowledge of neural mechanisms or evolutionary advantages does not tell us how to live. The authors discuss key figures such as E.O. Wilson, Patricia Churchland, Sam Harris, Jonathan Haidt and Joshua Greene, each of which has their own take on the relationship between science and morality. A general flaw correctly identified by the authors is the proclivity to overreach, for instance in the work of Paul Zak who claims to

show that oxytocin is the mechanism at the heart of the moral guidance system. The authors also clarify the necessary background in terms of definitions, for instance distinguishing between the prescriptive, descriptive and prudential definitions of morality. Then they criticise Michael Schermer for his albeit sophisticated circular approach where he 'must assume at the beginning the values he claims can be demonstrated scientifically' (p. 155). There is also the deeper issue that moral disagreements do not depend on issues that can be resolved empirically.

In their discussion of a turn towards disenchanted naturalism, the authors contrast attitudes on such essential topics as life, intentionality and consciousness where the disenchanted view leads inexorably to the conclusion that consciousness is an illusion and that we have no free will. More seriously, moral scepticism leads logically to moral nihilism, leaving no room 'for the genuinely prescriptive, for real value or obligation: *this goes beyond the belief that moral truth cannot be known, to the belief that there is no genuine morality. The former is moral scepticism, the latter is moral nihilism.*' (italics in original) Technically, physicalism leads to nihilism, a conclusion already drawn by Dostoevsky in *The Brothers Karamazov*. One is left with science embracing a utilitarianism enabling us to achieve practical goals as a social engineering project underpinned by instrumental reasoning and a blurring of the distinction between persons and things. Moreover, it is important to remember that we are invariably embedded in history and culture as well as evolution when it comes to values. In concluding, the authors question the validity of researching a universal foundation for moral discourse, preferring instead the quest for a shared understanding through our differences. This may not be so grand, but at least it is more realistic.

■ The Perennial Philosophy and the Recovery of a Theophanic View of Nature

Jeremy Naydler

Temenos Academy 2019, 21 pp., £4 incl p & p to UK from stephenovary@onetel.net.uk

This is a lucid account of the topic affirming the spiritual dimension of existence and explaining how the Reformation and scientific revolution removed a view of nature as a manifestation of the divine. Like SH Nasr, Jeremy emphasises the inner dimension of the ecological crisis and the need to recover a sense of

wholeness and the capacity to reach a level of knowing where knower and known are included. In this way, 'human consciousness becomes the vehicle or mediator of God's self-knowledge' and we may be able to restore harmony to the world.

■ The Lost Vision of Nature

Joseph Milne

Temenos Academy 2019, 21 pp.,
£6 incl p & p to UK from
stephenoverly@onetel.net.uk

Joseph Milne's work is essential reading in the history of ideas, and I would strongly recommend his *Metaphysics and the Cosmic Order* to readers unfamiliar with his work. Here he looks more specifically at how our ideas of nature changed historically and culturally, tracing the views back to mediaeval nominalism and voluntarism. This removes the necessary connection between the human mind and the reality of things as well as final causes. The loss of a symbolic understanding in theology leads to literalism and fundamentalism, corresponding to scientism within science. Crucially, with Descartes, the quest for truth is replaced by that for certainty; contemplation gives way to doubt. This in turn gives rise to spiritual alienation, the topic of the second lecture where the physical world is understood as self enclosed and the pursuit of the common good is replaced by individualism. Tellingly, Milne writes that 'what the modern age dedicates itself to is a key to its essence' - in our case materialism in every sense. He also shows how objectivity removes ethics and leads to exploitative economics. In order to remedy the situation, we need to rediscover different orders of truth corresponding to different ways of knowing. Very highly recommended.

■ In Introduction to Western Moral Philosophy

Michael Langford (SMN)

Cambridge Text Education 2019,
221 pp., £19.99 h/b (p/b also available)

This is a lucid introduction to the subject based on lectures given to undergraduates and beginning with an introduction to the topic in terms of critical thinking and the nature of knowledge in relation to reason, evidence and argument. The treatment is chronological, with extended extracts and questions for consideration as well as comments on some of the texts. There are chapters on Plato, Aristotle, the Stoics and Epicureans, Thomas Aquinas, Hobbes, Hume, John Stuart Mill, Kant and a survey of contemporary schools of thought. There is also a useful glossary and a discussion of

the two distinctive though related definitions of materialism. The conclusions make it clear that the central issues are likely to remain contested, such as the relationship between ethics and metaphysics, objectivity and subjectivity, rationality and ethics. Michael gives his own view in the last few pages with a reflection on love, drawing on the work of Martha Nussbaum - I liked her three characteristics of love (agape) in terms of compassion, individuality and reciprocity. He ends with three universal injunctions, originally from Judaism: do justice, love mercy, walk humbly. The book can be recommended not only to students, but also to any general reader wanting to become better acquainted with Western moral philosophical thought.

■ On Freedom

Cass Sunstein

Princeton 2019, 127 pp., £9.99, h/b.

Cass Sunstein is a behavioural economist at Harvard whose book on digital democracy I reviewed last year as well as his earlier work *Nudge*. Here he returns to the theme of nudging in policy formulation within a framework involving freedom of choice and self-control. A key new concept is navigability in terms of how people reach their desired destination - it is here that nudges can form a kind of GPS with our well-being in mind. The author presents a variety of case histories for consideration and defines the central goal of nudging as making people better off, as judged by themselves - a critical qualification. Advice in this sense needs to be easy to understand and act upon, and an interesting case in point is the transformation of American nutritional advice from a pyramid metaphor to proportions on a square plate. Time also plays an important role as our views evolve. For policymakers, the question is how best to present what the author calls the 'choice architecture' of possibilities while respecting the freedom and dignity of the individual. The argument is clearly articulated and raises important ethical and economic issues.

■ How to Keep your Cool

Seneca

Princeton 2019, 220 pp., £13.99, h/b.

This is a new edition of Seneca's classic essay on Anger at a time when the phrase 'anger management' had yet to be coined. There are effectively a range of emotions involved, such as annoyance, frustration, petulance, indignation and rage. These stoic virtues of restraint and self-control come to the fore, in that Seneca's

advice is to avoid anger and nip it in the bud as it arises. One context is a sense of self-importance giving rise to the feeling of being wronged - for Seneca, the great person never submits to this sense, and he gives an extraordinary example from the horrific reign of Caligula relating to the behaviour of a father during a period when the Emperor was executing his son on wholly specious grounds.

He defines greatness in terms of strength and goodness, being 'solid to the core, just and firm from the bottom up' with the equanimity such that 'nothing that can occur can provoke you'. He quotes the advice in court of a person who has reached old age (Seneca himself was obliged by Nero to commit suicide in A.D. 65) to accept hurts and say thank you. He also advises readers not to undertake tasks that are too numerous or greater than our resources, as problems are bound to arise as well as anger from putting ourselves under stress. Finally, we should be mindful of our mortality and ask ourselves 'what joy there is in proclaiming our grievances and wasting our brief lifespan.' Let us rather cherish our humanity and not be a source of fear or danger to anyone. This is wisdom down the ages.

■ Four Quartets – TS Eliot and Spirituality

Richard Brock

Patrician Press 2015, 121 pp.,
£12.50, p/b.

In June, we have a Cathar pilgrimage from Puivert to Foix, which we have themed around TS Eliot's *Four Quartets* as a spiritual journey through time to the timeless. This book takes the reader through four chapters on experience, symbolism, suffering and freedom, explaining various aspects of the background in French symbolist poetry, Dante, St John of the Cross and others. He sees the 'intersection of the timeless with time' as the alignment of our nonphysical or spiritual with our physical nature. The chapter on suffering explores the depths of the human condition as represented in the poetry but also the transformative and purgative experience represented by fire and leading ultimately to a degree of freedom that is also detachment - it is a timely reminder that the ultimate journey is inner rather than outer and that Eliot is a helpful companion along the way.

PSYCHOLOGY- CONSCIOUSNESS STUDIES

■ Coherent Self, Coherent World

Diana Durham

O Books (John Hunt) 2019, 142 pp.,
£10.99, p/b

This wide-ranging book - subtitled a new synthesis of myth, metaphysics and Bohm's Implicate Order - is an important contribution to reorienting our culture towards the neglected inner dimension that gives rise to coherence and meaning and which constitutes our deeper being. The author shows how we can experience coherence by accessing this deep self, drawing not only on the fundamental ideas of David Bohm on the implicate and explicate orders and on dialogue, but also on her extensive knowledge of art, Arthurian myth, the Grail and archetypes of transformation. The presidency of JFK is an interesting case study of the Arthurian myth and the practice of presence in the face of military and political pressures, which he also recognised in his opponent, enabling an outcome that averted disaster and saved face on both sides. This attitude is in stark contrast not only to George W Bush, as discussed, but also to the attitude of Trump and other populist leaders. Our own journey towards wholeness involves recognising and integrating the shadow and our woundedness, not only individually but also collectively as we evolve towards an inner wisdom that unites intuitive insights with rational analysis. It is a bold and inspiring vision, enriched with the author's own poetry.

■ Clock versus Compass – Art of Positive Balance

Reena Raj

O Books (John Hunt) 2019, 309 pp.,
£14.99, p/b.

This topical book of practical wisdom is a distillation of the author's thinking about life as a coach and practitioner of positive psychology. The content is arranged in seven sections: mind, self-awareness, relationships, work engagement, soul and meaning, play and motivation. Each entry consists of a contrasting or complementary principle with some basic definitions and exposition followed by a slightly more extensive commentary, an appropriate quotation and a practical suggestion for implementation. In some cases, like microscope and telescope or head and heart, it is a question of balancing as the title suggests, but in others such as judging and discerning,

daydreaming and visualisation, the direction of travel is from the first towards the second. In still other cases, the second word provides a reframe, for instance from struggling to juggling, from controlling time to creating time, from being aggressive to being assertive, or from being self-conscious to being self-aware. I found a lifetime of good advice packed into the book, which I would recommend for regular review, even opening the book at random - I will be putting my copy in our guest bedroom.

■ Awakened Relating

Lynn Marie Lumiere

New Harbinger 2018, 201 pp.,
£16.95, p/b.

Subtitled 'a guide to embodying undivided love in intimate relationships', this lucid exposition lives up to its title and can be recommended to any couple seeking to bring more consciousness into their relationship in terms of both being and living together. Undivided Love 'is the energy, or conscious life force, that permeates all of existence' with the implication that the other is in fact the Self, that a couple represents two expressions of one Being. A critical implication is that what we are already what we are looking for: love already exists within us and is evoked by the other. So the challenge is to relate to each other from Being and to transcend the conditioning of the ego as the source of separation, unworthiness, victimhood and blame so easily projected onto the other. Relational wounding has to be healed within relationship and must be faced rather than avoided. Sacred sexuality recognises that this energy holds the same intent in all of life, namely to return to our primordial unity and experience the wonders of our shared Being. In this respect, there is an excellent chart comparing conventional with awakened sexuality, moving from doing and performance towards being. The non-dual philosopher Rupert Spira give some useful insights in terms of happiness being an inside job and helping readers become intimate not only with our partners but with the whole of life. The final chapter is on awakened activism, reminding us that we all need to serve something larger than ourselves. A very worthwhile read.

■ The Other Side of the Valley

Linda Edwards

O Books (John Hunt) 2019, 179 pp.,
£10.99, p/b.

The author was trained as a medical doctor and then became a chief executive in the NHS in her 30s. She is now a shamanic healer,

trainer and therapist with a PhD in healing through altered states of consciousness, the theme of the journey described this book. It is quite a rollercoaster, taking in NLP, hypnosis, fire walking, plant medicine and shamanic practices using ASCs, with many subsections in the two main parts. She also has direct contact with traditional shamans, who have an important message for rampant Western consumerism and its impact on the environment. The author's journey also reflects one from rationality and the need for proof towards intuition and experience, even if these are not classically provable. In personal terms, experience trumps experiment any day. One striking experience is ostensibly initiating a healing process in her husband located in the UK when she was in an Ayahuasca session in Peru. Among indigenous cultures where she has worked, it is striking to note that they have no incidence of mental illness and degenerative disease. She concludes with some general observations on feeling and the importance of using the full spectrum of consciousness in the healing process.

■ A Path to the Stars

Janet Saunders

Hermes Books 2019, 109 pp.,
£12.99, p/b.

Subtitled 'journeys of discovery in hermetic astrology', this book explains the context and key themes of Hermeticism with its alchemical transmutation of material into the spiritual, of darkness into light, as also explored by CG Jung. The central figure is Marsilio Ficino as hermetic astrologer and priest, one who understood the principle of sympathy. The author brings in the work of Iain McGilchrist in relation to Ficino, arguing for the continuing relevance of the latter for our deeper self-understanding. The author then explains the background process to the creation of an engaging play about the journey of the soul, where each planet gives gifts to be remembered and deployed at an appropriate point on the journey: protection, discrimination, courage and patience, among others. The narrator provides the linking insight, and there are pertinent dialogues between the soul and various planets, for instance Mercury reminding her that 'only when the mind is still and ceases reasoning and in response to the heart's desire, does the true dream come.' There is no way out, only through the labyrinth on a continuing adventure into the Light. All in all, a timely reminder of our deeper nature and purpose.

■ Keys to your Life

Leon Norell

Amazon 2018, 117 pp., Kindle, £2.39.

This is a simple book of practical wisdom reflecting the author's life experience and offering guidance on how best to refine your nature and evolve your consciousness to a higher level by going beyond current patterning. Brian Tracy famously said that if you want things in your life to change, you have to change things in your life, and for Leon this means changing your intentions and beliefs which is then mirrored on the outer level. In reflecting on our experience, we can ask whether we created, promoted or allowed a certain event and we can then make the necessary course correction. This may involve a process of release, on which Leon gives some guidance. His perspective includes a nonphysical dimension and reincarnation as a process of evolutionary refinement, which implies that we are all in some way responsible for our present and can shape our future. The book is well-written and illustrated with some good cartoons. We would do well to heed and implement its advice.

■ I'll Meet You at the Lost and Found

Sam Glory – www.samglory.com

O Books 2019, 146 pp., £10.99, p/b.

Subtitled 'a guide to living from the context of your inner self', this book is a series of short reflections with practical injunctions using developments in the life of Max Hannigan to illustrate the life lessons and moving from an outer-directed to an inner-directed focus. Many of the themes will be familiar to readers – stilling the mind, happiness within, following the heart, patience, living in the now, trusting your inner voice, authenticity, purpose, forgiveness, abundance, gratitude and kindness. However, knowing is one thing but practical action is another. Adjusting one's frequency is important in terms of what one attracts into one's life, and Max's transformation in the course of the book is as wide-ranging as it is instructive.

■ DMT and My Occult Mind

Dick Khan

CreateSpace 2017, 674 pp., no price given, p/b.

This book reports on more than 100 of the author's experiences of DMT, the spirit molecule extensively researched by Rick Strassman. He explains that he experienced spontaneous out of body experiences as a child and has a background in theosophy and esoteric studies – hence the title. Each account has its

own title but these go on for 550 pages, so only the most intrepid researcher devoted to the subject is likely to make time to read it all. The author then discusses some of the significant implications, which he does not think are consistent with a materialistic understanding of consciousness. There are other non-physical intelligences and, 'life as we know it is not limited to life as we see it.' This requires a broader intellectual framework that can be provided by esotericism, and it is interesting to reading in this respect some extracts from classic books by Allen Kardec. The author quotes extensively from the parapsychological content of Wikipedia, without apparently knowing that this is coordinated by an organised group of sceptics. This is a useful resource for the specialist researcher, but general readers really need a shorter digest of the findings.

ECOLOGY/ ECONOMICS/ FUTURES STUDIES

■ Making Eden

David Beerling, FRS

Oxford 2019, 257 pp., £20, h/b.

Subtitled 'how plants transformed a barren planet' this fascinating book describes the rise and diversification of plant life originating in a certain type of algae and gradually colonising the land, leading eventually to large forests that impacted the climate through feedback mechanisms. The author also highlights their partnership with symbiotic fungi – later with soil microbes – and the way in which they contributed to the spread of greenery on land. I was glad to see a mention of the importance of Lynn Margulis with her idea of endosymbiosis, but surprised that there was no reference to James Lovelock and the role he attributes through his Gaia hypothesis to plants in maintaining the stability of the atmosphere. For the general reader, the final brilliant chapter is essential reading, having already considered key factors in shaping climate.

The author comments that our current crisis is urgent and unfolding at a time of burgeoning population and rising global food demand. He characterises this as Eden under siege. Biodiversity is declining at alarming rates, and this 'grim state of nature is our fault' with the latest projections on population reaching 12 billion by 2100. We are releasing 36 billion tonnes of carbon dioxide into the atmosphere every year as a result of combustion of fossil fuels. He explains that a warming

of between 0.8 and 1.7°C by 2050 – almost certain – commits nearly 1/5 of plant and animal species to extinction, and this figure rises to a quarter with over 2°. A new concept for me was 'extinction debt', describing the timeline between habitat destruction and terminal decline where species are 'sitting in the extinction waiting room.' He compares our current situation with the end-Triassic mass extinction of 200 million years ago involving huge injections of carbon dioxide into the atmosphere. This wiped out biodiversity on land and acidified the oceans. To put this in perspective, the author comments that 'current rates of increase in atmospheric carbon dioxide concentration, climate change and ocean acidification far outstrip those experienced during any past extinction event. Humans have added to the mix with deforestation, habitat loss and fragmentation, expansion of agriculture, overfishing, over-hunting, and pollution. Lesson one from Earth history is this: human activities are creating the perfect storm for the sixth mass extinction, priming the engine of species extermination. (p. 183) If this does not concentrate your mind, it should! Especially when you learn on the next page that the recovery time of the biosphere from mass extinction runs into millions of years.

The author tells the story of post-1992 environmental policy development, which is quite inadequate to the scale of the crisis we face, prioritising as it does economic growth over ecological stability. We are 'systematically liquidating the Earth's assets, turning valuable natural resources into waste much faster than nature can regenerate them.' We currently use up the equivalent of 1.5 Planet Earth's renewable resources, a figure likely to increase to 2 by 2030. Beerling rightly notes that the only way of avoiding dramatic overshoot 'is to take action by shrinking the aggregate demands of humans on the environment, and moving towards a sustainable future' – for instance by reducing our meat consumption. We also need to leave some fossil fuels in the ground and abolish fossil fuel subsidies. He is also right that we have a question of intergenerational justice on our hands, but how to engage the political process in which economics is so decisive? We are absolutely at a crossroads where 'the window of opportunity this closing as the era of consequences dawns.' Extinction Rebellion understand how high the stakes are but hope is conditional on action, as Jason Drew and I argued in our book *The Protein Crunch*. The time for regenerating and working with nature has never been more

pressing, so we must all push for the priority of ecology over economics, as Lester Brown has done in his work over many decades. If we continue to behave like ostriches, we will end up boiling like frogs.

■ Emerson and Environmental Ethics

Susan L. Dunston

Lexington Books 2018, 133 pp., £60, h/b.

My copy of Emerson's *Essays* is dated 1890 and is inscribed by my grandmother. This new book on Emerson is equally informative for Emerson aficionados as well as those whose interest lies principally in environmental ethics, and indeed aesthetics, given his enthusiasm for the good, the beautiful and the true. The five chapters cover his notion of nature literacy, values related to ethics and aesthetics, comparisons with strands of contemporary environmentalism, the garden and the wilderness, and Emerson's preoccupation with nonviolence both as a romantic and a reader of Hindu scriptures. His 'original relation' is with nature in the context of oneness - as in his essay on the Oversoul - and wholeness implying an attitude that is attentive, relational, empathetic and aesthetically sensitive. Here one can also see his influence on Thoreau, Muir and more recently Loren Eiseley and EO Wilson.

In terms of the contemporary scene, there are interesting discussions on the interface between Emerson and eco-feminism, systems theory and indigenous environmental philosophy, where I was struck by the writings of Gregory Cajete, who characterises humans as the Earth becoming conscious of itself... Its most highly developed sense organ. He rightly points out that Western science needs native science with its cultural context of kinship with the Earth and therefore a valuation of feelings. He characterises this as an attitude of attention, empathy and respect similar to how we would like our own bodies treated. Instead, really have a Faustian will to power in the mainstream, although environmental activists share the native scientific perspective. This highlights the need for a philosophy of wholeness and oneness in ontological, epistemological and ethical terms so that we no longer see ourselves as separate from nature and acting on it - a principle of harmony rather than domination. This is an inspirational and important contribution to contemporary environmental thinking.

■ Social Threefolding

Rudolf Steiner

Rudolf Steiner Press 2019, 200 pp., £13.99, p/b.

I reviewed a volume of essays on social threefolding last year where the elements are our economic, political and cultural institutions aiming respectively at associative co-operation, human rights and equality, and freedom in these three spheres. This collection of essays by Steiner, many of the first time in English, exhibit the development of his social thinking. It is interesting to that his book *Towards Social Renewal* was so widely read in the aftermath of the First World War, and was reviewed in the New York Times. His agenda was the rebuilding of European social structure beyond the alternatives of capitalism and communism, which is still relevant today, especially given his fundamental scientific/spiritual perspective and focus on the nature of the inner life.

He criticised the popular focus on improving outer conditions without any reference to human element, commenting on the inherent circularity given that it is we who create the conditions. Anthroposophy poses a kernel of brotherhood and service analogous to Peter Deunov's focus on love and life for the whole. The memoranda from 1917 about the war and the state of central Europe show Steiner as an acute political commentator speaking from a central European perspective and therefore critical of Woodrow Wilson's peace proposals requiring German submission and sowing the seeds of further conflict. His remarks on variations in the national psyches of Europe are still pertinent, as is his insistence on faith in spirit's power and the need for real strength of purpose equal to the establishment and with a plan for action. My only criticism is that the introduction seems to presuppose familiarity with the idea of threefolding, and it would have been a good idea to explain this concept in more detail.

■ On Presence

Peter Reason (SMN) and Sarah Gillespie

The Letter Press 2019, 32 pp., £7 plus £2 UK postage - peterreason@me.com

This is a delightful short collection of essays on the orchard, the nest, silence and the role of art in a time of catastrophe. The writing on the living presence of the world is simple and evocative, reflecting that 'I am part of the Orchard, and the orchard is part of me. The world is made up not of separate things but of beings in relationship' - a perspective that

needs to become mainstream. The accompanying drawings are detailed in composition after a Japanese style. Waiting can be a time to be present in complete simplicity. In the case of both writer and artist, they shift from the habitual self axis into a wider identity and zone of empathy and contentment.

DEATH AND DYING

■ Remember Every Breath is Precious

Lesley Joan Lupo

White Crow Books 2018, 180 pp., £14.99, p/b.

Subtitled 'dying taught me how to live', this book is another good example of the practical wisdom derived from the near death experience and which forms a kind of gnosis for our times; it is endorsed by many of the major scholars in the field, and the title encapsulates the essence of the message. The author was involved in a horse accident, found herself immediately out of the body, and is then transported into a dimension she calls Upstairs where she meets her guides and members of her soul group - strikingly, these include the 'blue lady' that she had perceived as a child. The essential message is contained in a chapter called Awakenings, while chapters explain the background to her life and her slow but remarkable process of healing and recovery. There is also an extensive dialogue chapter where she answers questions put by Leslie Klein.

The author finds herself, like many other experiencers, engulfed with an unprecedented intensity of selfless love and perceives a central point of energy emitting this love and radiance whose oneness informs the whole of manifest existence. Spiritually remembering who you are is one of our hardest tasks in terms of recovering the connection with our immortal soul, which must then be interwoven with human consciousness (p. 41). The keynotes of our time are cooperation, kindness, forgiveness and 'a higher level of hope', which must first arise as an inner light within. I was struck by the phrase 'a unified field effort to treat all life with dignity, with respect, no matter who they are' as I find these sentiments repeatedly in the work on inspiring purpose that I do with young people. Another remarkable feature of the book is an evidential reading with a medium, who describes key features of Lesley's experience that are analysed by Gary Schwartz. This valuable book repays careful study in a way that the lessons it contains can be used in practice.

■ Release into the Light

Annabel Chaplin – foreword by Anne Baring (SMN)

Archive Publishing 2019, 122 pp., £12.95, p/b.

In our materialistic culture, there is widespread ignorance about the nature of death, which is why the central message of this evidential book is so important: that death is a transition to a new realm of consciousness. Due to this ignorance, we do not prepare for our final journey, so many people do not realise that they have died and try to continue influencing their loved ones. As this only seems possible by draining their energy, those left behind can unaccountably find themselves chronically debilitated, a condition that can miraculously vanish once the deceased person in question has been released into the light, as related in many fascinating and compelling case studies in this book. Many people, especially in cases of sudden death, do not realise what has happened and can become earthbound and attached to their loved ones. This creates bondage in both the physical and nonphysical worlds, requiring a process of severance whereby both parties can move on from their suffering. I strongly encourage people to read this book and to apply its insights to their own life journeys, including its inevitable next phase.

■ Veil – Love Poems from across the Threshold

Lisa Smartt and Morton Felix

University of Heaven 2018, 79 pp., no price given, p/b.

This is a remarkable and touching short volume of poems ostensibly communicated by Morton Felix to his daughter beginning three weeks after his death and intended to comfort her grieving mother, Susan, his wife of 56 years. This followed a spiritual transformation during his dying process, which led to the project written up in the book reviewed immediately below. He says that he will be returning sooner than he thought to that fragrant earth of sense and time. He refers to his wife's light shining, but also to her tattered tears. He promises that she will join him one day in this starry paradise, where souls are disrobed and as naked as love while now there is a thick sheet of glass separating them. Also that she will discover, 'as all is unveiled that none of us is more than this ancestral transparency...there is no end, but also no beginnings, so do not worry, we will dance beneath the tents with the sails of time between us.' There are many such lyrical and evocative passages as well as hints all transformation.

■ Words at the Threshold

Lisa Smartt

New World Library 2017, 194 pp., \$15.95, p/b.

The Final Words Project has amassed 1,500 case histories of end-of-life words, which are extensively analysed in this ground-breaking book. The starting point was the author's experience of the death of her father recounted above, and as a linguist she was interested in patterns of language expression; working with Raymond Moody, she also came to understand the more general significance of nonsense statements, which Raymond has been studying for over 40 years. One interesting theme is the continuum of language from the literal through the symbolic and metaphorical to the telepathic. Various examples are given of telepathic communication (and also synchronicity), and it is suggested that this system kicks in when normal physiological channels fail.

The language of journeys is pervasive, with related imagery of packing and getting ready to go - in one case, the dying person says 'watch me disappear' and immediately dies. Consistent with other literature, dying people find themselves on the threshold between worlds and can often see things invisible to everyday perception. There is a very interesting discussion on different types of nonsense, including situational, prepositional (up and down) and hybrid, with a related analysis of non-referential language. However, even if there is no physical referent for the carer, there may well be a transcendent referent for the dying person so in that sense the language is not entirely non-referential. In any event, it seems that we move into a world that cannot be adequately described in sequential language. This important study sheds new light on the dying process as we gradually build up a clearer picture of how death is a transition to another dimension of consciousness.

■ In Times of War – Messages of Wisdom from Soldiers in the Afterlife

Edited by Jonathan Beecher

White Crow Books 2019, 146 pp., £9.99, p/b.

Jon Beecher is the founder of White Crow Books, which has reprinted a lot of classics from the psychic field. The reference is to William James's argument that one white crow refutes the hypothesis that all crows are black. This is a very interesting collection, with some classic extracts from Wellesley Tudor Pole and Lord Dowding. Many of the individual

cases are indicative of patterns immediately following death, while leaving the body in war is sudden and unexpected. There are also interesting extracts from the Wickland scripts, including ostensible communications from JJ Astor and Alfred Vanderbilt, who were drowned on the Titanic and Lusitania respectively. They reflect on their rather self-serving lives, and one overall conclusion is that life is about serving others. The cases also reinforce the argument that it is very unhelpful in making the transition to know nothing in advance about the possibility of consciousness beyond death. This is a very worthwhile collection.

■ The Near-Death Experience

Calvert Roszell, foreword by Dr George Ritchie

Lindisfarne Books 2018, 119 pp., \$14, p/b.

This book discusses the NDE in the light of scientific research and Steiner's spiritual science. The first edition came out in 1992, and the research on the NDE has not been updated in terms of explaining the various approaches and theories involved. Is interest lies rather in its analysis of Georgian Ritchie's classic NDE from 1943 interpreted in terms of Steiner's philosophy and understanding of Christ, to which quite some exposition is devoted. Steiner had personal experience of the realms visited by near death experiencers, as did Swedenborg. The book sheds an interesting light on the NDE within the larger context of spiritual science.

■ Raising Faith

Claire Waters

6th Books (John Hunt) 2019, 108 pp., £7.99, p/b

This is the remarkable story of a child psychic-medium, whose talent was discovered when she was 4 and her younger brother, Tom, also sensitive, was only 2. In its matter-of-fact tone, the book reminded me of accounts by children who remember previous lives. The story is as much that of the mother's spiritual evolution as that of the children, with a sceptical father sympathetic but uninvolved in the process. She describes the impact of meeting Gloria, a psychic medium, then the first revelation that her daughter Faith saw her great-grandfather all the time. There is another little girl playmate – "I just think of her and she comes" – who apparently died in a fire and whose identity the author manages to trace. She also describes her own experience as a trainee stage medium, with startling results. There are comic moments when Faith explains that

her mum has just thrown the coats on great-granddad whom she sees sitting in a chair, but it's okay because "he can sit above them." The perspective also includes a reference to past lives and the importance of responsibility. There is one chapter with direct questions and answers from Faith and some sound spiritual advice arising from the author's reading and journey of spiritual awakening. The book is of general interest, but more especially for parents of children with similar gifts.

POLITICS/GENERAL

■ The Arrogance of Power

J William Fulbright – foreword by Bill Clinton

University of Arkansas Press 2018, 268 pp., £30, p/b.

Senator William Fulbright (1905 – 1995) served as chairman of the Senate Foreign Relations Committee from 1959 to 1974, a record term. This is the 50th anniversary edition of a book first published in 1966 when Fulbright was still in office and it still has a great deal to say as a commentary on power and its abuse. As Clinton observes, Fulbright believed that politics was about the power of ideas, not the idea of power. He comes across as a man of remarkable character and integrity, unafraid to speak his mind as a dissenter on matters of principle and policy in the name of what he called the higher patriotism. The book is developed from a series of lectures with case studies covering Latin America, USSR, China and especially Vietnam. Perhaps the two key chapters are the first and the last, on the arrogance of power and the two Americas, humanistic and puritanical. Fulbright is a keen observer of human and political nature, occasionally expressing himself with scathing wit and irony: 'not once, as far as I know, has the United States regarded itself as intervening in a Latin American country for selfish and unworthy motives – a view not necessarily shared, however, by the beneficiaries.' He excoriated the US intervention in the Dominican Republic, offering what he felt was constructive criticism which was then condemned as irresponsible instead of a necessary calling to account in the spirit of democratic debate.

The arrogance of power arises when power is confused with virtue and imbued with a mission. In this respect, Fulbright's main criticism of communism and indeed of revolution is not so much the content as the fervent fanaticism of its extreme proponents. He shows how the US faced a dilemma in being simultaneously hostile to communism

and sympathetic to nationalism, which sometimes meant backing repressive military dictatorships and reactionary oligarchies. His view of human nature is pragmatic and humanist. He points out that commitment to ideologies is largely a question of birth and culture but that they may lead to antagonists demonising each other so that the enemy becomes 'the embodiment of doctrines that we consider evil' (p. 165). This is all too familiar. He elaborates on his humanistic theme in the final chapter contrasting the democratically humanistic America of Lincoln with another strand characterised by intolerant puritanism and a crusading morality - think of the war against terrorism: 'excessive ideological zeal is our problem as well as the communists'. For these reasons, he feels that the US should concentrate on being an example of democracy rather than trying to export its political brand around the world. Politicians would do well to heed his advice.

■ War or Peace

Deepak Lal

Princeton 2018, 495 pp., £24, h/b.

This highly informative book is about the struggle for world power by an Indian political economist whose books significantly include the title *In Praise of Empire*. The pivotal event is the global financial crisis of 2008, interpreted by China and Russia as the death throes of the liberal economic order promoted by the US and making space for the rise of state-led authoritarian capitalism. A fundamental divide in the study of world politics arises between the Kantian idealist position exemplified in his work on perpetual peace (1786) and which I have discussed in recent issues in relation to books by Nicholas Hagger and David Ray Griffin; then, on the other hand, a Hobbesian or realist position based on inherent aggressive impulses and the pragmatic exercise of power, leading to the thesis that only a global hegemon currently exemplified by the US can keep the peace.

Lal traces American exceptionalism and the self-image of benevolence back to the British Empire and Theodore Roosevelt, quoting his Nobel Peace Prize address to the effect that 'international society was like a frontier settlement without an effective police force.' The question, however, is the nature of the police force and who exercises political and military power and in whose interests. Lal sees Obama abdicating this role for the US, and the book was written before many of the recent defining statements by the Trump administration. China

and Russia are not only challenging Western hegemony, but also Western values, and any transition to China as the global police force would be a betrayal of these values to an inherently repressive regime with a new Emperor in its current president (Putin also plays the role of Czar). Lal argues that China and Russia must be contained, if necessary by force.

In his conclusion, he quotes the realist position of EH Carr about preconditions for war and system breakdown: the existence of powerful and resentful states outside the international order, a profound and sustained destruction of the global economy, and the unwillingness of any single power or hegemon to underwrite the international order. Lal would prefer the US to retain this role, supported increasingly by a democratic India. From a realist point of view, this has some merit, although it lacks transformative aspiration. The term world government does not appear in the index, nor does 'New World Order'. There is no mention of the work on civilisations by Toynbee, Sorokin, or, more recently by Hagger; nor is there any reference to the covert and subversive work of the CIA, which undermines many of the US liberal ideals by underwriting right-wing dictatorships friendly to US economic interests (see my review of Griffin in the previous issue). Of course, there are no easy solutions to issues of international order, and this book provides much food for thought.

■ Manufacturing Terrorism

T.J. Coles

Clairview Books 2019, 212 pp., £14.99, p/b.

I reviewed the author's books on Britain's secret wars and President Trump in these pages last year. This book is equally penetrating and disturbing in its extensively documented analysis, with the subtitle 'when governments use fear to justify foreign wars and control society' through the deep state of their secret services. Depressingly, it seems that enemies are essential for the way in which politicians and arms companies currently operate, also through revolving doors between government and industry. Without enemies, there is less incentive to innovate in weapons research, so an 'enemy vacuum' may be a threat to economic growth. The author describes a number of chilling documents relating to the Shock and Awe policy visited on Iraqi civilians with the doctrine of Rapid Dominance where bombardment becomes sufficiently intimidating for the country in question to accept the will of the US. He adduces evidence

for the connection between the Iraqi invasion and radicalisation, with backup from Chiefs of MI5. He also notes that drones are a terrorist-generating machine, especially with their collateral civilian casualties; and he documents how Al Qaeda was created by the West.

The second part discusses how terrorism can be manufactured in six steps: blowback from bombardment campaigns, including the use of drones (see figures on p. 81); using proxies as part of policies aimed at regime change (see p. 96 ff. for how this applies to Syria); acting as a provocateur to goad individuals to commit terrorist acts; 'green-lighting' whereby terrorists are allowed to strike when they could be captured or killed, for instance Osama bin Laden; false flag operations such as European operations under Gladio, all of which are based on deception of the public; and simulations faking events, with a number of specific examples, including the drills going on during September 11, which the author does not treat in detail on the grounds that analysts do not agree on the causes of the tower collapse - however he could have looked at the collapse of WTC Building 7 as an inexplicable anomaly without some form of controlled demolition. In his conclusion, the author correctly notes that mainstream media tends to pathologise dissent by using the conspiracy theory label, which only serves to further the self-interested agendas of elites using the deep state to achieve their ends. Highly recommended reading.

■ Taking Conspiracy Theories Seriously

Edited by M.R.X. Dentith

Rowman and Littlefield 2018, 251 pp., £23.95, p/b.

This highly informative volume fully justifies its title. The origin of the notion of conspiracy theory goes back to reactions to the official report on the assassination of JFK, and was coined by the CIA as a rhetorical device to discredit those who questioned the official line. As such, it has been extremely effective, and is represented in this volume by what is called the generalist approach, whereby conspiracy theory and conspiracy theorists can be generically dismissed out of hand as credulous and irrational. By contrast, the particularist view insists that each case should be assessed on its merits and in relation to the evidence. The editor shows that the standard view of social scientists, and indeed journalists, is generalist and pejorative, illustrating this with an article submitted to *Le Monde*, to

which he and his colleagues responded. This had to do with the so-called 'conspiracy mindset' and culture as by definition intellectually suspect, a view generally and understandably promulgated by governments. As is also the case with parapsychology, social scientist sceptics are interested in researching the psychosocial profile of such people.

However, governments do routinely engage in deception and conspiratorial or clandestine activity through their intelligence services. A good definition of conspiracy theory comes from an otherwise flawed article by Sunstein and Vermeuken (p. 183): "an effort to explain a situation by reference to the machinations of powerful people, who attempt to conceal their role (at least until their aims are accomplished)." The editor tellingly observes that the use of the expression conspiracy theorist is the modern equivalent of heretic. In this respect, it is interesting to read about the treatment by the press of Congresswoman Cynthia McKinney year after 9/11 when she questioned whether the Bush administration had prior warning of the attacks. As the author of this article points out, she made no assertions but did pose suggestive questions and on that basis was vilified as a dangerous and irresponsible conspiracy theorist.

As long-term readers of this journal may recall, I have reviewed the many books by the philosopher of religion David Ray Griffin on 9/11, where he also observed that the official account is also technically a conspiracy theory, although not in a derisive rhetorical sense - his work is not cited in this volume. The editor mentions (p. 221) that 'the results of these investigations [into 9/11] are contentious and, despite claims from both sides that the case is settled, the various competing theories persist.' However, this observation requires further analysis into specific issues, and for me the knockdown incident is the freefall collapse of WTC 7, which the official account insists must have been due to fire and not, despite all appearances, to controlled demolition. Interested readers can consult comparative videos online. One can only hope that this book will be widely read and act as a timely corrective to pejorative dismissals of conspiracy theories on specious a priori grounds.

■ Aldous Huxley - the political thought of a man of letters

Alessandro Maurini

Lexington 2017, 169 pp., \$36.99, p/b.

I have been reading Huxley for many years, and readers may recall that I reviewed his last book of lectures, *The Human Situation* in the summer of

2017. Like George Orwell (Eric Blair), Huxley was a King's Scholar at Eton and related not only to TH Huxley but also Matthew Arnold. Given the prescience of his book *Brave New World* in terms of totalitarian manipulation through applied science, this scholarly book is most welcome as a way of revisiting Huxley's thought and its relevance for our time. The author explains some of his key influences including Pareto with his emphasis on the role of instincts and feelings (also the psychological factor more generally) and his criticism of ideology. Civilisation is driven by irrational as well as rational impulses; nor should one underestimate the importance of religious sentiment highlighted in the work of Spengler, Sorokin and Toynbee. This gives an undulating rather than purely progressive course of history, as we are indeed observing at present.

Huxley's work culminating in *The Perennial Philosophy* informed his idea of the dual nature of humanity not solely constituting Machiavellian motives of power, greed and fear, but also love and goodness. He uses this idea as the basis for a pacifist realism and embraced a decentralised communitarian ethos. The debate between pacifist and ordinary realism is highlighted in the appendix describing an encounter with the Italian Giuseppe Prezzolini as an advocate of hard-nosed and cynical political realism who regards Huxley's position as weakness in the face of the basics of human motivation: 'a human society can only be formed and survive on force, oppression, dependence, servitude, compromise, calculation, intrigue...' Hence his condemnation of Huxley's message of hope. These men have a different reality principle, and one can only hope that Huxley is right. In terms of planetary challenges, what is called the desperation principle authorises the call to the responsibility principle and opens up a hope principle, but only conditional on action; so without action with respect to the human impact on the biosphere, hope cannot be responsibly justified. This puts us all on the spot.

■ Golf as Meaningful Play – a Philosophical Guide

W. Thomas Schmid

Lexington 2017, 216 pp., \$90, h/b.

This is a book that every reflective golfer will enjoy reading, and it is sure to enhance your pleasure in an understanding of the game. Its fundamental message is framed in terms of Aristotelian virtue ethics that golf is best understood in terms of self-fulfilment or *eudaimonia*, with corresponding virtues often

associated with the mean, for instance neither too tense nor too relaxed. So golf is less about performance and outcome – “how am I doing?” – than “what kind of person am I trying to be?” and it is here that the virtues come in: courage, temperance, justice, wisdom and friendship. A whole chapter is devoted to the idea of the shot in terms not only of mechanics, but also felt imagination and where each hole is a drama in three or four shots - or perhaps rather more... Golfers all know appreciate the importance of emotional and mental self-management. As Bobby Jones put it, “golf is played mainly on a 5 ½ inch course: the space between your ears.” There is an interesting contrast between Scottish golf as “freedom and the challenge of mastering an often unkind universe” with the American “ideal of perfect skilfulness achieved in a beautiful, but hazardous garden.” The author correspondingly contrasts the ethos of Augusta and Royal Dornoch, while also discussing the significance of the four greats, each with their own hallmarks: Jones, Hogan, Palmer (not Nicklaus) and Woods. Nor does he forget community, tradition and friendship, which all golfers know so well - and there is a discussion of other well-known books and films with which some readers will be familiar. One striking observation from Scott Peck is his parallel with Christian *kenosis* or self-emptying as the ego is inflated by triumph, then deconstructed by disasters during the round - perhaps a textbook case cited is Jean van de Velde at Carnoustie in 1999. There are many other rich seams in this hugely informative book which golfers are sure to relish as a treasured item in their golfing library.

■ Walking a Rainbow

Michael Shearer

CreateSpace 2018, 340 pp., £7.99, p/b, Kindle £3.03 (also recorded on YouTube)

This engaging narrative tells the story of the author's walking of the Camino de Santiago with his nine-year-old son, who keeps him firmly grounded. The experience is an intense one but with many light moments and they meet an extraordinary variety of unusual people as well as experiencing various degrees of comfort in the refuges along the way, with some good meals, conversations and glasses of wine. Each of the 40 chapters has an indicative heading as the adventure unfolds. The author remarks that there is something in the rhythmic dynamic of walking that the mind likes, and which also gives plenty of space for processing and the realisation of passing ephemerality on the journey - he refers to the gift of time on the pilgrimage and how the important things in life emerge in the process.

Then there are the inevitable physical struggles and challenges. Towards the end he has an expansive experience of trust and connection with nature around him. Reading the book is a vicarious experience, but one especially worthwhile for those who are considering making the pilgrimage.

OTHER BOOKS RECEIVED

■ Quantum Space

Jim Baggott

Oxford 2019, 421 pp., £20, h/b.

A lucid exposition of loop quantum gravity and the search for the structural space, time and the universe focusing around the work of Lee Smolin and Carlo Rovelli.

■ The Politics of Autism

Bryna Siegel

Oxford 2018, 325 pp., £19.99, h/b.

■ A Waldorf Guide to Children's Health

Drs Michaela Gloeckler, Wolfgang Gebel and Karin Michael

Fifth edition of a comprehensive best-selling book first published in 1984.

■ Saints – A Very Short Introduction

Simon Yarrow

Oxford 2018, 139 pp., £7.99, p/b.

■ Biometrics – A Very Short Introduction

Michael Fairhurst

Oxford 2018, 124 pp., £7.99, p/b.

An informative introduction to the benefits and limitations of biometrics-based identity checking.

■ C.S. Lewis – A Very Short Introduction

James Como

Oxford 2019, 134 pp., £7.99, p/b.

This is a concise overview to the many aspects of C.S. Lewis's life and work the influential work he packed into 65 years. Readers gain many personal insights from his friends and colleagues, including Owen Barfield, as well as understanding the range of his work in many different fields.

■ Identity – A Very Short Introduction

Florian Coulmas

Oxford 2019, 147 pp., £7.99, p/b.

An important book on the topic that has become central to our time and with interdisciplinary coverage including philosophy, logic, anthropology, gender, social identity,

law, psychology, linguistics and literature.

■ The Power of Cute

Simon May

Princeton 2019, 238 pp., £14.99, h/b.

A wide-ranging consideration of the phenomenon of cuteness, with special reference to the US and Japan. The originality of the book lies in its highlighting of the ambiguity of the cute in terms of ambivalence and indeterminacy, investigating widely different characters including Mickey Mouse and Kim Yong Il.

■ Friedrich Nietzsche and European Nihilism

Paul van Tongeren

Cambridge Scholars Press 2018, 198 pp., £61.99, h/b.

A relatively technical treatment of Nietzsche's thoughts on nihilism, including a history of the concept and its current influence, including its relationship to pessimism and decadence.

■ The Bright and the Good – the connection between intellectual and moral virtues

Edited by Audrey L. Anton

Rowman and Littlefield 2018, 335 pp., £24.95, p/b

■ How Population Change will Transform our World

Sarah Harper

Oxford 2019, 230 pp., £9.99, p/b.

Paperback edition of this excellent book reviewed in 2016.

■ The Lifetimes When Jesus and Buddha Knew Each Other

Gary R. Renard

Hay House 2018, 213 pp., \$24.99, h/b.

The modus operandi of this unusual book is an encounter with discarnate teachers proceed to chart the evolution of Jesus and Buddha through six lifetimes when they were said to be together. The background comes from *A Course in Miracles* and the overall trajectory is towards undoing the separation of the ego and embracing non-duality.

■ Project Phenomena: Evaluating the Paranormal

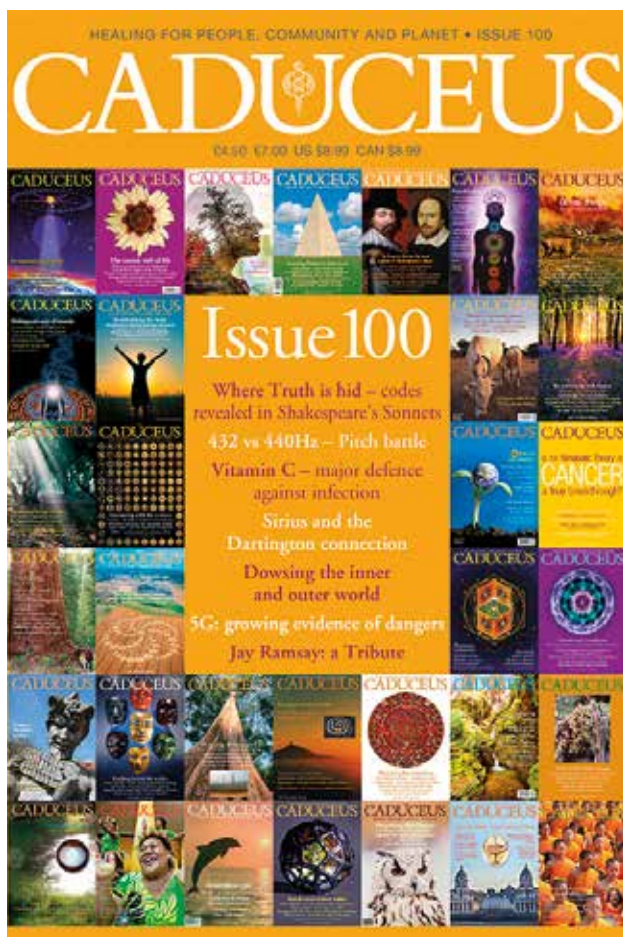
Brian Allan

White Crow Books, 2018, 238 pp., £13.99, p/b.

■ Meditations for the Dead

Rudolf Steiner

Rudolf Steiner Press 2018 (2002), 62 pp., £7.99, p/b.



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The Sichów Foundation is located in a historical manor home set in a parkland 50 miles from Krakow. The seminar includes a cultural outing. Registration fee: 350 Euro.

Christopher M. Bache is *professor emeritus* in the Department of Philosophy and Religious Studies at Youngstown State University. He is also adjunct faculty at the California Institute of Integral Studies and a Fellow at the Institute of Noetic Sciences. An award-winning teacher, Chris' work explores the philosophical implications of non-ordinary states of consciousness in his pioneering work, *Dark Night, Early Dawn*.

For more information and to register:
www.sichow.pl/events/chris-bache

The Scientific and Medical Network is a leading international forum for people engaged in creating a new worldview for the 21st century. The Network brings together scientists, doctors, psychologists, engineers, philosophers, complementary practitioners and other professionals, and has Members in more than thirty countries. The Network is a charity which was founded in 1973 and became a company limited by guarantee at the beginning of 2004.

The Network aims to:

- *challenge the adequacy of scientific materialism as an exclusive basis for knowledge and values.*
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- *Network Review, published three times a year*
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Membership Applications

To request a membership application form, please contact:

**The Network Manager,
The Scientific and Medical Network,
151 Talgarth Road,
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