

ISSN 1362-1211 | No 123 | 2017/1

Network Review

JOURNAL OF THE SCIENTIFIC AND MEDICAL NETWORK



A Spiritual View of Evolution p.3 • Emergent Spirituality p.15
The Cosmic Consciousness Connection at Frenchman's Cove p.27

NETWORK CALENDAR 2017

24 June	Centenary Event – <i>Complexity and the Implicate Order: The Legacy of David Bohm and Ilya Prigogine, UCL</i> with Prof Peter Allen, Prof Basil Hiley, Dr Vasileios Basios – leaflet enclosed
7-9 July	Annual Gathering, University of Plymouth , <i>Widening the Evidence Base in Science and Spirituality</i> . Keynote: John Hands – leaflet enclosed
4-7 September	Poland Continental Meeting with Institute of Archetypal and Religious Studies (ISAR) , <i>Shaping Influences: Fields, Archetypes and Living Systems</i> – leaflet enclosed
4-7 September	Poland Continental Meeting with Institute of Archetypal and Religious Studies (ISAR) , <i>Shaping Influences: Fields, Archetypes and Cultural Complexes</i>
October 28-29	Beyond the Brain XII , Regent's University, London with Dr Rupert Sheldrake and Prof Chris Roe from the Parapsychological Association, Dr Cassandra Vieten and Dr Dean Radin from the Institute of Noetic Sciences, Dr Diane Corcoran and Dr Penny Sartori from the International Association for Near-Death Studies and Prof Stuart Hameroff from the Center for Consciousness Studies, University of Arizona – leaflet enclosed
November 18	<i>Transformative Innovation in Health</i> . Day conference with the British Holistic Medical Association and the University of Westminster.

LOCAL GROUPS

LONDON - CLAUDIA NIELSEN – 0207 431 1177 OR EMAIL CLAUDIA@CNIELSEN.EU

We meet at 38 Denning Rd NW3 1SU at 7.30 for an 8pm start when parking restrictions are lifted. 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 22nd **Prof Keith Ward:** *Stephen Hawking nearly talks about God*

JUNE

Monday 12th **Prof Bernard Carr:** *Facing up to Mind and Spirit - do we need a Post-Materialist Science?*

JULY

Monday 17th **Dr. Ornella Corazza:** *The River of the Afterlife - the Phenomenology of Near Death Experience in Japan*

AUGUST

Monday 21st **Dr. Oliver Robinson:** *An Introduction to Sacred Geometry and Mystical Mathematics Coherence*

SEPTEMBER

Monday 25th **Laurence Freeman OSB:** *The Rule of St. Benedict - a Little Rule for Beginners*



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

NETWORK REVIEW is published three times a year by the Scientific & Medical Network, generally in April, August and December.

Editor: David Lorimer
4 Place Joseph
Lakanal, Les Baillards,
09600 Montbel,
France

E-mail: dl@scimednet.org

Web Site: www.scimednet.org

(Members may apply to the SMN Office for password to access the Members Only area of the web site).

Editorial Board: John Clarke,
Paul Kieniewicz, Denise Gurney

Printed by:
Kingfisher Print & Design Ltd,
Devon

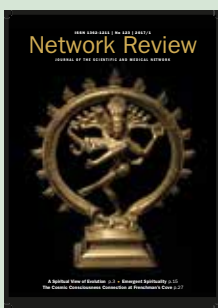
The opinions expressed in Network are those of individual authors and not necessarily statements of general Network views. The Network is in no way liable for views published herein.

Scientific and Medical Network
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



The Dance of Shiva

editorial

- 2** The Tao of Physics
Paul Filmore, Chairman

articles

- 3** The Leap: A Spiritual View of Evolution
Steve Taylor
- 8** Reperceiving the World
Willis Harman, with Chris Thomson
- 12** The Future of World Religion:
A Participatory Dream
Jorge N. Ferrer
- 15** Mystics and Scientists in the Twenty-First Century:
Science and Spirituality
Fritjof Capra
- 18** Emergent Spirituality
T!M Freke
- 21** The "Attitude of Incredulity"
John Poynton
- 23** Science and Religion: A Survey of Spiritual Practices and
Beliefs among European Scientists, Engineers and
Medical Professionals
Edited by David Lorimer

reports

- 27** The Cosmic Consciousness Connection
Eve Hicks and Jan Arriens
- 30** The World Congress of Faiths and Sarum College Promoting
Spiritual Life: an interfaith perspective "All We Need Is Love!"
Larry Culliford
- 31** Report of AHT/ SMN joint one-day conference
John Franklin

network news

- 32** NETWORK NEWS
- 32** MEMBERS' NEWS
- 33** LOCAL GROUP NEWS
- 37** MEMBERS' ARTICLES

review section

- 38** SCIENCE/PHILOSOPHY OF SCIENCE
- 42** PHILOSOPHY-RELIGION
- 48** PSYCHOLOGY-CONSCIOUSNESS STUDIES
- 51** ECOLOGY-FUTURES STUDIES
- 54** GENERAL
- 60** BOOKS IN BRIEF

Apology: a proofing glitch meant that the wrong text was printed under Larry Culliford's report in the last issue - see p. 30 for correct version.



The Tao of Physics

Dr Paul Filmore, Chairman
chairman@scimednet.org

Forum: Editorial (Please comment via the members' website)

One of the responsibilities in being your chairperson is the honour of chairing at meetings. At our recent (spectacularly successful) Mystics & Scientists conference in April, I chaired the Skype session with Fritjof Capra, who was online from a hotel room in California. See Fritjof's article on page 15 in this issue. Not only was it a challenge for the technology, but also for attendees and Fritjof to see and hear one another, first in the talk and then, afterwards, during the meaningful dialogue. In fact, the session ran very smoothly, and was one of the highlights of the conference.

During Fritjof's opening talk, I suddenly realised that here I was, sitting in front of someone who may have had a significant influence in changing my life! Many years ago, I was a physics undergraduate at Surrey University, only 10 miles down the road from where we were holding the conference. During this time, I read Fritjof's book *The Tao of Physics* and was much moved by it. As Fritjof discussed writing the book and the effect it had had on his life and peers (both positive and negative), I realised that perhaps Fritjof had not understood another major reason for the worldwide effect of the book. When he finished his talk, I was able to have a brief dialogue with him on this matter in front of the audience. I realised that, as an undergraduate, Fritjof had become a role model for me. It was not so much because of the physics in the book, or his vision, but that one, (I), could relate, learn from, and develop new thoughts and concepts from very different subject areas. In fact, I could relate areas of experience and knowledge which my schooling, and even contemporary society, had kept in separate boxes. This was true 'thinking outside the box'.

The issue here is that we really do not know what influence we can have on the world, and the people around us. Sometimes we have to put our heads up above the parapet and express or share what we believe or are thinking at present, understanding that this can, and probably will, change as the journey of life gives us more insights, experience and wisdom. I am thinking here, as one example, of the evolving journals of Thomas Merton. However, is this not what we also, the SMN, are doing? I hope so. The journey may not always be comfortable, but it is a journey well worth undertaking, and the rewards for others are enormous.

Please continue to support us, the work we do, and the people (particularly young people, of whom there were quite a few at the Mystics conference) we attract. We need more of the right types of role model in our world. Perhaps by giving young people, as we did in Mystics and Scientists, a platform to speak, we can empower this happening into the next generation.

[To comment on this editorial, please visit our web site, and when logged in, click on 'Forums' under 'Network', and find the 'Editorial' group.]

Bibliography:

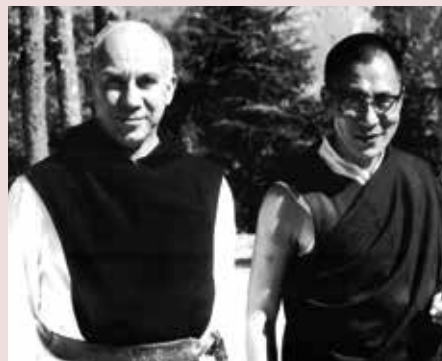
Merton, T. (1973) *The Asian Journal of Thomas Merton*, New Directions.

For information:

At the Mystics & Scientists 40 conference, Charlotte Lorimer (final year undergraduate) gave a talk on her final year project, and Merlin Sheldrake did the same with reference to his PhD research. In addition, three MSc students were supported in their attending by reduced fees. Merlin and his brother Cosmo Sheldrake provided musical entertainment on Saturday night.

You complain because there is a war, but war is the proper state of the world in which men are a series of numbered bodies. War is the state that now perfectly fits your philosophy of life: you deserve the war believing the things you believe. Insofar as I tend to believe those same things and act according to such lies, I am part of a complex of responsibilities for the war too. But if you want to identify me, ask me not where I live, or what I like to eat, or how I comb my hair, but ask me what I think I am living for, in detail, and ask me what I think is keeping me from living fully for the thing I want to live for.

Thomas Merton





The Leap: A Spiritual View of Evolution

Steve Taylor



In this piece based on his new book of the same title, Steve looks at the inner side of evolution and signs of more widespread spiritual awakening, which leads him to an optimistic vision of the human future.

On a physical level, evolution can be seen as a process by which living beings become increasingly complex and more intricately organised. But evolution has an *inner* dimension, too. Increasing physical complexity is mirrored internally in the expansion of awareness and the intensification of consciousness. In these terms, we can see evolution as a process by which living beings become increasingly conscious and aware, both of the world and of themselves.

At the same time as being the most physically complex beings on this planet (certainly in terms of our brains), human beings are probably also the most intensely aware and conscious living beings. Although we can't be certain, it seems likely that we have a more intricate and expansive awareness of reality and a more intense degree of *self* consciousness than any other animal.

Types of awareness

Here it's useful to think in terms of four different types of awareness. The first of these is *perceptual* awareness, which means experiencing the phenomenal world around us, through our senses. The second is *conceptual* awareness, which means being aware of concepts such as time, the past and the future, death and — more subtly — morality and justice. It means being able to think in terms of categories and recognize the relationships (including the differences and similarities) between different phenomena. It's related to conceptual and symbolic developments such as alphabets and written languages, numbers and mathematics, and systems of laws.

Thirdly, there is *subjective* awareness, which means awareness of our inner lives, of our selves and our own states

of being. And finally, there is *intersubjective* awareness: the individual's emotional and empathic awareness of and connection to others, not just to other human beings but also to animals, the Earth itself and even the whole universe.

Even the simplest life forms have perceptual awareness. And some non-human animals clearly have more acute perceptual awareness than human beings, at least in certain areas. For example, dogs have a much more acute sense of smell than we do, and they can hear sounds beyond our auditory range. But we human beings seem to possess the other two types of awareness — conceptual and subjective — to a more intense degree than other animals. Some animals show degrees of self-awareness — for example, magpies appear to be able to recognise themselves in mirrors — and some animals, such as apes, can be taught a rudimentary awareness of categories and numbers, showing some conceptual awareness. But the amazing intricacy and complexity of human language, compared to the apparently rudimentary languages of some animals, testifies to the unprecedented richness of our conceptual and subjective awareness. No other animals appear to be able to examine their own inner subjective world as deeply as human beings, or to have as rich and intricate understanding of the world we inhabit.

Intersubjective awareness is a little more problematic. Simple life forms obviously possess awareness of other members of their species, and moreover, there are animal groups whose behaviour is so precisely and intricately coordinated that it might be seen as the manifestation of some subtle intuitive connection, as if individuals can sense and respond to the experience of other members of the group e.g. the "swarm behaviour" or "swarm intelligence" of ant colonies, termites, flocks of birds or shoals of fish. This could certainly be seen as a form of intersubjectivity. However, this intersubjectivity only extends as far as a particular group, rather than to the species as a whole, or to other species. Human intersubjectivity is much more wide-ranging and indiscriminate, even extending to other species (such as when identification and empathy with animals leads to vegetarianism or veganism) and may also be deeper, involving a powerful sense of compassion.

However, we tend to forget that, even if we may generally have more intense awareness than other animals, the human race as it presently is can't be the end point of the evolutionary process. It's completely illogical to assume that evolution is just behind us, rather than in front of us as well. The intensification and expansion of awareness will undoubtedly continue.

And in my view, the phenomenon of spiritual awakening shows that this process *is* continuing among us at the moment.



Spiritual awakening and evolution

Spiritual awakening can be seen as a shift into a more expansive and more intense mode of awareness. In my new book *The Leap* (2017) - based on my psychological research into more than 100 cases of spiritual awakening - I define 'wakefulness' as '*a higher-functioning state in which a person's vision of and relationship to the world are transformed, along with their subjective experience, their sense of identity and their conceptual outlook. This shift brings a sense of well-being, clarity and connection. The person develops a more intense awareness of the phenomenal world, and a broad, global outlook, with an all-embracing sense of empathy with the whole human race, and a much reduced sense of for group identity.*'

My research found that a shift into this state can occur both gradually and suddenly. When it happens gradually, it is usually due to a long term commitment to spiritual practices and paths.

When it occurs suddenly, it is most frequently due to intense psychological turmoil, which has the effect of 'dissolving away' our normal self-system. The turmoil - which may be due to a diagnosis of serious illness, bereavement, addiction, intense stress or depression - breaks down the psychological attachments which form our normal sense of identity. For many people, this just equates with psychological breakdown, but for a minority, it allows a new self to be emerge - a new expansive, higher-functioning state of being which seems to have been latent inside them.

The state of 'wakefulness' can be seen in evolutionary terms - in fact, in terms of the four different types of awareness I've just mentioned. Wakefulness involves an intensified perceptual awareness, a more vivid awareness of our surroundings, with an enhanced sense of beauty. The world around us becomes more real, more alive, and more fascinating. We may become aware the whole world is full of a spiritual force which creates a sense of harmony and meaning and folds all seemingly separate things into unity.

Wakefulness also involves a broader conceptual awareness - a wider sense of perspective, a transcendence of group identity, and an unconditional universal morality. And it involves an intensification of subjective awareness. It means going *deeper* into ourselves, and becoming more aware of the richness and fullness of our inner lives. It means finding stillness and harmony inside ourselves, and discovering that at the core or ground of being, we are one with all things.

And finally, spiritual awakening involves an increased intersubjectivity. As the sense of separateness dissolves away, there is increasing connection between a person and the other human beings, other living beings, the whole of the nature world, and the whole cosmos itself. This means increased empathy and compassion, and increased sense of responsibility and concern for others. And at the most intense level, it means actually becoming *one* with the whole cosmos, and becoming aware that there is no difference between subject and object, so that we literally *are* everything.

It is therefore possible that what we experience as spiritual awakening is a part of the evolutionary process, part of the same movement towards more and more expansive awareness which has been underway of hundreds of millions of years. Through spiritual awakening, evolution may be moving towards a new stage of development that is more expansive than the present normal human state in the same way that this normal state is more expansive than the consciousness of other animals.

Spiritual views of evolution

I'm certainly not the first person to put forward such a spiritual view of evolution. Many philosophers have suggested that evolution is a purposeful process of the unfolding and intensification of consciousness, including the German philosophers Hegel and Fichte, the French philosophers Bergson and Teilhard de Chardin, the American philosopher

Ken Wilber, and the Indian philosopher Sri Aurobindo. Teilhard de Chardin (1961) saw evolution as a process of the spiritualization of matter, which was progressing toward an 'Omega Point.' This is the culmination of the whole evolutionary process, when all matter is wholly infused with spiritual energy and all phenomena, including human beings, become one.

In his book *Cosmic Consciousness* (first published over a hundred years ago), Richard M. Bucke (2017) describes his conviction that cosmic consciousness is a stage of development that awaits the human species as a whole. Bucke distinguishes two other types of consciousness. First, there is the simple consciousness of animals (and early human beings), which means that they are aware of their surroundings and have the ability to respond to changes in their environment. Second, there is the self-consciousness of human beings, which probably developed, according to Bucke, just a few thousand years ago. This means that, for the first time, in addition to being aware of their surroundings, human beings are aware of themselves. And now we're witnessing the onset of cosmic consciousness. Although, according to Bucke, it is quite rare at the moment, cosmic consciousness is becoming increasingly common and will eventually spread to every member of the human race. In the future, it will become human beings' normal state, which we all naturally develop into in adulthood.

I'm obviously implying here that evolution isn't just a random process generated by genetic mutations and natural selection. In my view, there's an *impetus* behind evolution that encourages a movement toward both greater physical complexity and a more expansive awareness. Living beings have an *innate tendency* to develop in the direction of more intense perceptual, conceptual, subjective and intersubjective awareness. You could compare evolution to the development of a human being from embryo to adulthood. Here development moves naturally and inevitably from the simplest state — when two cells meet and merge — through levels of increasing complexity, as cells split off and organise and start to form different parts of the body. The process unfolds along predetermined lines, following a kind of blueprint or mould specific to our species.

I think evolution is similar to this but on an enormously extended time frame, unfolding over hundreds of millions of years. Perhaps the only difference is that the direction of evolution may not be as fixed as the development of individuals — perhaps there's a simple *tendency* to move toward greater complexity and awareness that is broadly directional without being completely predetermined. Evolution is teleological - in the sense that there is an impetus moving inevitably to greater intensities of awareness - although I think it is highly unlikely that this process is moving towards a specific goal, as Hegel or Teilhard de Chardin suggested. It is more likely that the process is open-ended, leading to ever greater physical complexity and intensify of awareness *ad infinitum*.

There may be a connection with the concept of emergence. Systems theorists suggest that natural systems and organisms have an innate tendency to move toward greater complexity, spontaneously generating structures which are more than the sum of their parts. Applied to evolution, this would suggest that order and complexity are not created by genetic mutations, but by self-organisation and the emergent properties of systems. A number of biologists - beginning with Samuel Alexander (1920) and with the more recent example of Robert Reid (2007) - have argued that natural selection isn't sufficient to explain the arising of genetic variation and new life forms, and that a concept of 'emergent evolution' is required to account for these. The only difference between this view and the spiritual view of evolution I'm putting forward is that the latter implies that emergence doesn't happen spontaneously, but is impelled by the innate tendency of life itself to move towards greater complexity and awareness.

It's also worth noting that this view of evolution can still include genetic mutations as a mechanism of change. The significant point may be that, within this model, genetic mutations aren't necessarily random. Beneficial genetic mutations may be generated by the impetus of evolution, as a means of creating change and greater complexity. This would help to explain the problem of how a negative phenomenon such as beneficial mutations (which occur extremely rarely and have to be cumulative, forming a sequence of development with mutations that have become before them) could be responsible for the incredible creativity of evolution.

So in my view, to believe that evolution is accidental is as illogical as trying to explain human development from an embryo to adulthood in terms of accidental factors. This process of *ontogenetic* (or individual) development closely parallels the course of evolution itself over the past four billion years, moving from simple cellular structures to increasing complexity and specialisation. This parallel includes the probability that both types of development aren't random but directional.

According to this view, there's something *inevitable* about spiritual awakening. It's the natural unfolding of a process of intensifying awareness that has been underway for millions of years. Wakefulness is latent inside us, waiting to emerge. You could say that, in a sense, it was *always* latent in living beings, even in the first single-celled bacteria. Aristotle originally put forward the idea (later taken up by other philosophers) that all higher evolutionary forms are latent in lower ones. He saw evolution as the unfolding of latent potential, leading to higher forms of life, all of which were inherent from the beginning.

And I believe that, at the present time, the latency of wakefulness has become so powerful that the state is ready to emerge. I believe that wakefulness is *already* emerging within us collectively, gradually moving the whole human race to a higher-functioning state of being and a more expansive and intensive state of awareness.

Evidence for an evolutionary leap

What evidence is there that such an 'evolutionary leap' is underway? I would say that there are five signs. The first four relate to individual experiences of wakefulness.

First of all, wakefulness seems to be *natural* for a small minority of people. There are some people who aren't awake due to a sudden transformation, or to decades of regular spiritual practice - wakefulness is simply their normal, natural state. That is, they live in a naturally more expansive and higher-functioning state, with heightened awareness and intense well-being, appreciation and presence, and a strong sense of connection or union to nature, and compassion for other human beings and living beings. Such naturally wakeful people don't usually become known in a spiritual context. They usually don't establish themselves as spiritual teachers, and usually don't follow specific spiritual paths, or affiliate themselves with particular traditions. Instead, they often become creative artists. Famous examples include Walt Whitman, D.H. Lawrence, Richard Jeffries (author of *The Story of my Heart*), Wordsworth and William Blake, and painters such as Turner, Monet, Caspar David Friedrich and the American painters Thomas Cole and George Inness. You can see such natural wakeful people as 'evolutionary throw-forwards' who live in a state of intensified awareness which will not become normal to human beings until a future time. They seem to be the spearhead of collective transformation.

The second sign of an evolutionary leap is that, among the great majority of human beings who don't experience wakefulness as their normal state, temporary awakening experiences are quite common. There are many collections and analyses of such experiences (e.g. Johnson, 1960; Laski, 1961; Hoffman 1992; Wade, 2000; Taylor, 2012b) and research suggests that a significant proportion of the population have had them at least once. For example, Heald (2000) found that 29% of a sample of 1000 had had an experience of 'a sacred presence

in nature'. Similarly, Greeley (1975) found that 35% of a larger sample had had the experience of being 'very close to a powerful, spiritual force that seemed to lift you out of yourself.' Similarly, a 1994 survey by the National Opinion Research Centre at the University of Chicago for *USA Today* magazine found that two thirds of Americans have had at least one mystical experience, and that 5% had them often (in Fenwick, 1995).

Awakening experiences tend to occur when we are inactive and relaxed, and our minds become quiet and calm, and so are often associated with sedate activities such as meditation, contact with nature, reading spiritual literature, or listening to creative or arts performances. (Paradoxically, though, the most frequent trigger of them is psychological turmoil. See Taylor [2011, 2012a] for a discussion on this.) For a few moments, our normal 'sleep' state slips away and the wakeful state emerges, like the sun from behind a wall of clouds. In these moments, we become aware of a heightened reality, a sense of connection, harmony and meaning. This suggests our normal 'sleep' state has only a loose hold over us and can easily dissolve away, even if it usually manages to reestablish itself.

The third sign is that many people feel a strong *impulse* to awaken. More and more people seem to sense instinctively that something is wrong with their normal state of being, that it is limited and delusory. They're aware that they're asleep, and they want to wake up. As a result, they feel impelled to investigate methods of expanding and intensifying their awareness such as following spiritual practices and traditions. Again, this suggests that our sleep state is losing its hold over us. It suggests that an evolutionary change is building up momentum within our collective psyche. The individual impulse to awaken is an expression of the evolutionary impulse itself. It's the same urge toward an expansion and intensification of awareness expressing itself through us.

The fourth sign (and the final one that relates to the individual experience of wakefulness), is the fact that awakening occurs so spontaneously and readily in response to psychological turmoil. In other words, at the same time as being the most important trigger of temporary awakening experiences, intense psychological turmoil can also trigger permanent wakefulness. As I showed in my book *Out of the Darkness* (Taylor, 2011), it is not uncommon for people who go through intense stress and turmoil - perhaps linked to bereavement, a diagnosis or cancer, alcoholism or depression - to undergo a sudden shift into the wakeful state. This often occurs when people have reached 'rock bottom', when they think they have lost everything. Their previous identity seems to dissolve away, and a new 'wakeful' identity suddenly emerges to replace it, like a butterfly emerging from a chrysalis. And from that point on, they live in a higher-functioning state of heightened awareness, with a strong sense of connection, compassion and well-being.

This is probably the clearest sign of the increasing latency of wakefulness. For the 'shifters' - as I called them in *Out of the Darkness* - who undergo awakening in this way, the wakeful state seems to emerge fully formed, as if it had been latent inside them, waiting for the possibility to unfold. Although there are sometimes periods of confusion and disturbance as the old 'sleep' state fades away and the new one establishes itself, the process seems natural and inevitable. And again, this suggests that the wakeful state is ready to emerge within our collective psyche. It is already there, fully formed and integrated, but only able to emerge (at least for some people) when the old sleep state dissolves away.

All of these could be interpreted as signs that the momentum of wakefulness is increasing, that it's beginning to unfold as the next stage in the evolution of life. As a result, it's manifesting itself in a variety of ways, in the same way that a rising water level manifests itself as overflowing rivers and lakes, and new streams, ponds, and tributaries. Wakefulness is also rising, and showing signs of its emergence everywhere.

A cultural shift

Fifth and finally, it's also possible to see signs of wakefulness in *cultural* changes. These have, I believe, been clearly visible for about 250 years. The second half of the eighteenth century was a very interesting time to be alive, particularly in Western Europe. For the previous few thousand years, Europe, like the rest of the world, had known little but brutality, oppression, and suffering. For the vast majority of people, life had been — in the words of the sixteenth-century philosopher Thomas Hobbes (2006) — 'nasty, brutish and short.' If you or I were able to travel back in time to, say, England in the early eighteenth century, we would be profoundly shocked by the cruelty and injustice we encountered, and the lack of compassion people showed to one another. But in the second half of the eighteenth century, a shift started to occur. A new surge of compassion began to develop, together with a new awareness of the importance of justice and the rights of other human beings and other groups. This led to a whole host of social and cultural changes over the following decades, including the emergence of movements for women's rights, animal rights, and the abolition of slavery, and the development of concepts of democracy and egalitarianism, more lenient forms of punishment, and so on.

This was also the time of the French Revolution and the American constitution, both of which were responses to the gross injustices of the feudal system, and based on the principle that all human beings were born equal and entitled to the same opportunities and rights. And culturally, this was when the Romantic movement flourished, when poets, artists, and musicians developed a new relationship to both their own inner world and to the natural world. The poets, painters, and musicians of the Romantic movement explored their inner beings in a way that artists had never done before and expressed a new ecstatic appreciation of the beauty and grandeur of nature. In evolutionary terms, this suggests an expansion of both subjective and perceptual awareness.

It was almost as if human beings were developing a new ability to transcend the separateness of the sleep state. It was as if their identity was expanding beyond their own mind-space, bringing an ability to enter the mind-space of others and so to empathise with them and feel compassion for their sufferings. There was a new sense of connection — to other human beings, other living beings, and to the natural world in general. That is, there was a marked intensification of intersubjective awareness.

At the same time, these changes suggest a different conceptual outlook, giving rise to new principles of justice and morality. There was a movement beyond egocentrism and self-centered morality toward a more universal perspective, beyond group identity toward a sense of common humanity. That is, there was an intensification of conceptual awareness.

This process continued throughout the nineteenth century, expressing itself through new egalitarian political philosophies such as socialism and the spread of democracy. The women's rights movement gained increasing influence — women became able to own property independently of their husbands, go to university, and enter professions. (New Zealand became the first country to allow women to vote in 1897, with many others following over the next two or three decades.) In literature, novelists such as Charles Dickens, Emile Zola, and Fyodor Dostoyevsky documented the lives of their society's poorest and most downtrodden people, illustrating the increased sense of empathy and compassion that was developing.

During the twentieth century, the transcendence of ego-separation expressed itself as an increasing sense of connection to the body and an increasing openness to sex. A deepening connection to nature — and a wider conceptual outlook — gave rise to the ecological and environmental movements. Similarly, an increasing sense of empathy toward animals led to the popularity of vegetarianism and veganism (in addition to more awareness of animal rights).

Over the last few decades this psychological change has also — arguably — manifested itself in a decline in conflict and warfare throughout the world as a whole. Most historians agree that the last seventy years (since the end of the Second World War) have been the most peaceful period in recorded history, both in terms of conflicts between different countries and conflicts *within* countries (such as revolutions and civil wars). At the same time, over the past few decades, an increasing movement away from materialism has manifested itself in the downshifting and downsizing movements, based on an awareness that the consumerist lifestyle is an obstacle to well-being, rather than the source of it.

And finally, perhaps the biggest cultural change of the last few decades — and the strongest cultural sign of the occurrence of a collective movement toward wakefulness — is the massive (and still growing) upsurge in interest in spiritual philosophies and the spread of spiritual practices such as meditation, yoga, and other techniques of self-development. This suggests an intensification of subjective awareness — an exploration of our inner being, a journey deeper into ourselves.

Everywhere there are signs of a movement beyond both ego-isolation and egocentrism, a growing sense of connection and empathy. There are signs of an expansion and intensification of awareness in all of the four areas I mentioned — perceptual, conceptual subjective and intersubjective. Particularly when coupled with the direct individual signs of awakening I described above, these signs could suggest that an evolutionary shift is occurring, and the human race is in the midst of a collective shift into a more expansive and higher-functioning state. Even if this process is a gradual and fitful one — and even if it may appear to be still in its nascent stages — we appear to be in the process of waking up.

A possible problem with this argument, I'm aware, is the idea that the intensification and expansion of awareness is linked to increasing physical complexity, in particular of the brain. How could a process of collective spiritual awakening in the human race be linked to increasing physical complexity? Am I saying that present-day human beings are more physically complex than our ancestors of, say, five hundred years ago, before this process of awakening began to occur?

Of course not. But the increasing complexity in this case may not lie in our brains or in us as individuals, but in our species collectively. Over the last three hundred years, since the beginning of the industrial revolution, the human race has become increasingly interconnected in more and more complex ways. Distances have collapsed, borders and boundaries have faded away, populations have increased and merged, and new technologies have constantly increased the communications and interactions between people. Teilhard de Chardin (1961) believed this increasing interconnection was so significant that it was creating a whole new domain of reality — the *noosphere*, as he called it, which would unite the whole human race into a single interthinking group. Peter Russell (1988) put forward a similar argument in his book *The Awakening Earth*, suggesting that our increasing interconnection was leading to the development of a 'global brain.'

Conscious evolution

However, at the same time as living of unprecedented spiritual awareness, unprecedented compassion and connection, we live in a time of unprecedented danger. The positive developments I've described above are opposed by extremely negative trends. Although many people have begun to move beyond materialism, many others cling to materialist ideals more firmly. Although there is greater general concern for the environment than ever before, together with a greater sense of connection to the natural world, the destruction of the earth's life-support systems is continuing apace, with governments and global corporations still seeing the Earth as little more than a supply of resources to be exploited.

Although many people are moving beyond group identity and conventional religion to an all-embracing spirituality, many others are clinging to their religious and national identity more firmly (as witnessed by the rise of nationalism and protectionism, and of Islamist terrorism).

Perhaps we shouldn't be surprised that some of these opposing traits seem to be getting stronger. When a new phase begins, the characteristics of the previous one often become stronger and more entrenched, in response to the threat of their demise. (The Swiss philosopher Jean Gebser [1970], who believed that human consciousness has evolved through different 'structures' over history, also suggested that the characteristics of each structure become more rigid and entrenched while it is in the process of being superseded.) Essentially, the cultural conflict taking place now is between the old values and traits associated with our sleep state and the new values and traits associated with wakefulness. The old traits are threatened and so seem to be asserting themselves more strongly. It's almost as if, within our collective psyche, the 'self-system' of our sleep state senses that it's being superseded and is trying to tighten its grip.

In relation to this, it's important to remember that our own individual psyche is connected to — and influences — our species as a whole. When we undergo awakening as individuals - or at least move towards awakening through

following spiritual practices and paths - we contribute to the awakening of our whole species. Our own leap is part of the leap of our whole species. We are part of the evolutionary process, and can influence it by practising *conscious evolution*, contributing to and intensifying the shift that is already underway. Our own self-evolution contributes to the process of evolution itself.

So, taking an optimistic vision of the human race's future, as more and more of us move toward wakefulness, this evolutionary change may gain more momentum. It may become easier for others to wake up. Temporary awakening experiences may become more common, and more and more people will feel an impulse to expand their awareness through following spiritual practices. Naturally awakened individuals may become more common too, and more and more people will experience sudden transformation triggered by intense psychological turmoil. At the same time, the cultural changes related to expanding awareness may grow more prevalent. The blueprint of the wakeful state may build up within our collective psyche until eventually it may replace sleep as the normal state that all human beings naturally develop in adulthood.

Then the human race will have made its evolutionary leap, and life will continue to progress towards greater levels of complexity and awareness.

Steve Taylor is a senior lecturer in psychology at Leeds Beckett University, and has published 10 books, including two volumes of poetic spiritual reflections. His prose books include *The Fall*, *Waking From Sleep*, *Out of the Darkness*, and his new book *The Leap: The Psychology of Spiritual Awakening* (published as an Eckhart Tolle Edition, with a foreword by Eckhart). He is also the editor of *Not I, Not Other than I: The Life and Teachings of Russel Williams*. His books have been published in 19 languages and for the last five years he has been included in *Mind, Body, Spirit* magazine's list of the '100 most spiritually influential living people.' His website is www.stevenmtaylor.com

References

- Alexander, S. (1920) *Space, Time and Deity*. Macmillan & Co Ltd: London.
- Bucke, M. (1901/2011). *Cosmic Consciousness: A study in the evolution of the human mind*. Retrieved 11/3/2017 from <http://www.sacred-texts.com/eso/cc/>
- Fenwick, P & E. (1995). *The Truth in the Light*. London: Headline
- Gebser, J. (1970). *The Invisible Origin: Evolution as a supplementary process*. Downloaded from www.unca.edu/~combs/integralage, 13/2/17.
- Greeley, A. M. (1975). *Sociology of the Paranormal: A reconnaissance*. Thousand
- Heald, D. (2000). 'BBC "Soul of Britain" questionnaire.' Fieldwork conducted 25 April-7 May 2000 by the Opinion Research Business (ORB), London.
- Hobbes, T. (2006). *Leviathan*. London: Continuum International Publishing Group.
- Hoffman, E. (1992.) *Visions of Innocence*. Boston, MA: Shambhala.
- Johnson, R.C. (1960). *Watcher on the Hills*. New York, NY: Harper.
- Laski, M. (1961). *Ecstasy*. London: The Cresset Press. Lawrence.
- Reid, R. (2007). *Biological Emergences: Evolution by natural experiment*. Cambridge, Massachusetts: MIT Press.
- Russell, P (1988). *The Awakening Earth: The Global Brain*. London: Arkana
- Taylor, S. (2010). *Waking from Sleep: The sources of higher states of consciousness and the way to permanent awakening*. London: Hay House.
- Taylor, S. (2011). *Out of the Darkness: From turmoil to transformation*. London: Hay House.
- Taylor, S. (2012a). Transformation through suffering: A study of individuals who have experienced positive psychological transformation following periods of intense turmoil and trauma. *The Journal of Humanistic Psychology*, 52, 30–52.
- Taylor, S. (2012b). Spontaneous awakening experiences: Exploring the phenomenon beyond religion and spirituality. *The Journal of Transpersonal Psychology*, 44 (1), 73-91.
- Taylor, S. (2017). *The leap: The psychology of spiritual awakening*. Navato, CA: New World Library.
- Teilhard de Chardin, P (1961). *The Phenomenon of Man*. New York: Harper.
- Wade, J. (2000). Mapping the course of heavenly bodies: The varieties of transcendent sexual experiences. *Journal of Transpersonal Psychology*, 32, 103–22.



Reperceiving the World

Willis Harman, with Chris Thomson



***Note by Chris:** I helped to produce “Metanoia”, a short-lived journal published in Holland. My job was to commission and edit articles. In the first issue (Spring 1994) the majority of articles were by Network members! I contacted Willis, because I liked what he said about the need for a different kind of science. I ended up contributing a few ideas and sentences to this article. The only thing changed here is the title, which originally was “Cause for Change, Cause for Hope”. Although I miss Willis very much, I am sure he is still with us in some form, helping us to develop and actually do “wholeness science”.*

There seems little doubt that a fundamental change has been going on in the Western world for several decades. While it is too early for the exact form of this to be discerned, we can already make out several of its basic characteristics.

- There is an increased awareness of the interconnectedness of phenomena. External and internal, matter and mind, objective and subjective, are increasingly seen as different aspects of the same essential oneness. This is apparent, for example, in depth-ecology and a number of new spiritual movements.
- There is a detectable shift away from a reliance on external authority towards internal authority. Whether it is religion, politics or science, there is growing disenchantment with external authorities and increasing reliance on one's own inner, intuitive wisdom.
- There is also a profound change in our ideas about causation, which again reflects a movement away from the external towards the internal. For example, the weak meaning of a statement such as “Our thoughts create our reality” is that the way we perceive ourselves and the world around us is affected by our unconscious minds. The stronger meaning of the statement is that we are co-creators of our world, and that the ultimate cause of anything is to be found not in the physical world, but rather in consciousness itself.

The contrast between these ideas and the objectivist, reductionist assumptions of science is extreme. In this context an article by Ken Wilber is helpful (1). He notes that the worldviews of practically all societies, with the exception of modern western society, agree on certain core characteristics. A central feature of this “perennial wisdom” is the belief that the world of material things is somehow embedded in a *living* universe, which is in turn embedded in a realm of consciousness or spirit. Things are not – cannot be – separate. Everything, no matter what, is part of this “great chain of being”. This perennial wisdom also holds that every human being is capable of being directly aware of all levels of this continuum, from matter to spirit. It further claims that ultimately, in this Oneness, everything is the cause of everything else. Thus, causality proceeds both upwards and downwards. For example, it is clear that in one sense chemical interactions in the cells of my muscles cause my arms to rise, but in another sense it is caused by my wish to raise it.

It has been a peculiarity of modern western society that it has based its official knowledge system, science, on a very limited view of this continuum. It has restricted itself to the matter end, where things are physically measurable, and to upward causation only. This in turn has led to the conviction that all phenomena are governed by inviolable, quantifiable “scientific laws”. In this are to be found the roots of the power of modern science, to create manipulative technology, but also of its principal weakness, its inherent inability to deal with the non-physical, especially anything related to our experience of consciousness. *By leaving consciousness out of its worldview, science has contributed to the widespread modern confusion about important matters such as values, meanings, aesthetic sense, ultimate human desires and motivations, spiritual yearnings and so on.*

The restriction of science to a narrow portion of “the great chain of being” was undoubtedly useful and justifiable for a particular period of history. The big mistake was to become so impressed with its powers of prediction and control that we were tempted to believe that science could lead us to an ever deeper understanding of the whole. Yet there is no reason to suppose that such a restricted form of knowledge will ever provide us with an adequate picture of the whole. We seem now to be sensing this at some levels, and we are therefore determined to legitimise a broader form of understanding. People feel the need to relate to the transcendental, yet there is a tension here because many of those scientists who deny the transcendental hold commanding positions as guardians of the only generally accepted cognitive authority in the modern world.

The present cultural shift implies a worldview in which we humans are spiritual beings in a spiritual universe, in which ultimate cause is *not* to be found in the physical world, and in which consciousness is not the product of billions of years of material evolution, but was and is always present. It is a worldview in which evolution is seen as taking place within consciousness, and in which the physically measurable world is to the Universal Mind as a dream image is to the dreamer's own mind. It is as impossible to imagine the eventual impact of such a dramatically revolutionary shift as it would have been impossible in the seventeenth century to imagine the characteristics of the modern world.

A new form of science

A society is characterised by its worldview. The prevailing worldview is strongly influenced by science. How then is the new paradigm related to the scientific worldview?

Science has been spectacularly successful at what it was designed to do – predict, control, and enable the manipulation of the physical world through a science-based technology. In view of this success, it might seem unlikely that its worldview, based as it is on such highly sophisticated disciplines as quantum physics, molecular biology, and complexity theory, could be challenged successfully by the cultural changes outlined above. In fact, the challenge is not to science itself, but rather to the claim that its worldview is an adequate base upon which to build individual lives or human societies. If a scientific worldview is to be used for these purposes, then it will have to be founded on a new epistemology.

“Epistemology” can be translated loosely as “rules of evidence”. It is the way we answer the question: “How do we know what we think we know?” The agreed epistemology of science includes such imperatives as restricting itself to public, objective data; the search for inviolable, quantifiable scientific laws; being able to replicate results, and so on. This has provided us with our current prediction and control science, and its worldview. But we have long known that there is something seriously amiss with this approach. It has no place for many of the most important things in life – intuition, creativity, aesthetic sense, spirituality, and the general conviction that life has essential meaning. In fact, it does not even have a place for what is most familiar to all of us, our own subjective awareness, our inner experience, our conscious intent. It omits consciousness altogether. To be more accurate, it attempts to explain it away in reductionist terms.

The scientific exploration of phenomena and experience related to consciousness has long been hampered by two big obstacles. First, subjective experience is not normally accepted as valid evidence in science because it is not public, objective or replicable. Second, many consciousness-related phenomena do not fit comfortably within the scientific worldview. For instance, the common sense assumption that conscious volition is causal – that by simply choosing I cause things to happen – conflicts with the assumption in science that the universe operates according to causal laws, and that these can be known objectively. Scientists have improvised ways of dealing with these two objections, such that for most of the time they do not cause a problem. For example, research into the efficacy of analgesics continues, despite the fact that pain is clearly a very subjective matter. Similarly, useful research has been carried out on imagery, emotions and dreams, all of which depends very largely on subjective reporting. Paranormal experiences – those that appear to contradict both scientific and conventional notions of reality – are typically explained away as non-replicable, or faulty observation, or fraud.

The situation can hardly be considered satisfactory. Downward causation, causation from consciousness, is largely unacceptable as a scientific concept despite being one of the most impressive parts of our practical experience. A group of scientists and philosophers have tried to evolve an epistemology that might be acceptable to the scientific community, and which can at least accommodate the most basic aspects of consciousness, particularly awareness, volition and creativity. Its main features are:

- It is *radically empirical*, as urged by William James. This means that it is experiential in the broadest sense, in that it includes subjective data as a primary source, rather than being limited to physical-sense data. It also addresses the totality of human experience, such that no phenomena or experiences are ignored merely because they appear to violate agreed scientific laws
- It is objective, open and free from any hidden bias. At the same time, it admits both external and internal experience as evidence

- It insists on open inquiry, while recognising that this may be met only incompletely, particularly when addressing knowledge that involves a deeper understanding of human experience
- It places emphasis on the unity of experience. It is therefore sympathetic to the holistic view by which parts are best understood through the whole, but does not exclude the reductionist view, which seeks to understand the whole through its parts
- It acknowledges that science uses models and metaphors that represent only aspects of reality
- It recognises the partial nature of all scientific concepts of causality. In other words, it questions the assumption that a nomothetic science – one characterised by inviolable laws – can in the end deal adequately with the fundamental question of causation
- It is participatory. It explicitly acknowledges that understanding comes not only from being detached, but also from cooperating and identifying with whatever is being studied, and experiencing it subjectively. This means a real partnership between the observer and the observed
- It recognises the role and personality of the observer – including his or her unconscious processes – in any scientific work. The corollary also follows: to be a competent investigator, he or she must be willing to risk being profoundly transformed during the process of exploration. Because of this transformation, the whole epistemology may have to be replaced by another, more appropriate one, for which the former may have laid the intellectual and experiential foundations

We believe that this epistemology is likely to become increasingly acceptable to the scientific community precisely because of the growing cultural changes noted earlier. It would open the door to a more thorough investigation of all aspects of consciousness. It could help to resolve the dilemma described by C.P. Snow (2): that of attempting to operate from two different and mutually contradictory worldviews, the one of reductionist science that prevails in our institutions of power, and the other the humanistic spirituality that most of us use in our everyday lives.

The significance of all this should not be underestimated. We are accustomed to the idea of revolutions within science, such as that of quantum physics. These have taken place within the current epistemology of empirical science. *What we are talking about here, however, is the revolution of the whole of science itself.* If such an epistemology is eventually accepted, it would undoubtedly amount to the most dramatic development in the history of science since the seventeenth century.

Change at the individual level

For several decades a growing number of people, both inside and outside mainstream institutions, have been making the kinds of personal changes described above. Each has in their own way come to the conclusion that our thoughts create our realities and are the cause of what happens to us; that each of us has at the core of our being a deep sense of purpose and meaning; that fear can be removed from our lives by recognising that we only fear what we believe to be fearful, and that even unconsciously held beliefs can be changed; that if we trust in and operate as much as possible from unconditional love, the universe seems to support us in mysterious ways; and that it really helps to live as if all experience is feedback, neither to be deplored nor exalted, but simply to be learned from.

Although it is true that in the past some individuals have made discoveries like these and changed their lives accordingly, never, as far as we know, has an entire society attempted to operate on such a basis. The exciting prospect before us is that, first, individuals and small groups, and then

organisations, and then finally whole societies might shift to a transcendental worldview. If and when that occurs, completely new ways will open up for living in harmony with Nature and each other, and encouraging the development of our highest potential.

Transformation on a global scale

When enough individuals in an organisation change, then the organisation itself begins to change. When enough organisations change, this puts pressure on the whole system to change. One of the forces helping to bring this about is the emerging worldview referred to earlier. Another force, perhaps more pressing, is the growing sense that the present system just does not work. It does not work for people in the “developing” countries, it does not work for the poor and low paid in developed countries, it does not work for the planet, and it does not work for future generations. It is not sustainable in the long run.

It is not just wishful thinking to speak of a “paradigm change” throughout the modern world. It is already happening, pulled by a spreading vision of what could be, and pushed by systemic crises. Global problems are symptoms of a deeper, underlying systemic flaw. The fact is that we cannot create a sustainable society on the basis of the western world’s dominant understanding of reality. Hardly a week goes by without hearing about some environmental disaster or threat of climate change. Frequently the blame is attributed to companies. And the usual response is to attempt to penalise the culprits, legislate for environmental control, and repair the damage. However, what seems like a perfectly reasonable response at the time utterly fails to get to the heart of the matter.

We find it difficult to think about these questions in terms of whole systems, to recognise, for example, that businesses and the economy are but parts of the larger ecological system, and to acknowledge that practically all of the proposed remedies are ineffectual attempts to patch up a system that will in the end require much more fundamental change. It is not as if fundamental change is, in practical terms, any more costly or difficult than a patch-up. It is just that we have much more resistance to it!

“Few people can be unaware these days of the complex of global problems of degradation, depletion of resources, species extinction, toxic chemical concentrations, soil depletion, deforestation, desertification, global warming, and so on.”

The familiar litany of environmental problems hardly needs repeating here. Few people can be unaware these days of the complex of global problems of degradation, depletion of resources, species extinction, toxic chemical concentrations, soil depletion, deforestation, desertification, global warming, and so on. The point to note is that there is a strong correlation between all of these and the world economy as it is currently constituted and practised. It is not as if we do not know this, but we tolerate the situation because the alternative – remedying it – would, so the prevailing wisdom goes, eat into profits and cause job losses. Meanwhile, yet more demands on the environment are made by those living in chronic poverty. Overgrazing, the destruction of forests for firewood, and topsoil erosion are some examples of this. These problems can only be properly addressed by doing something about the root cause, poverty itself.

It is essential to recognise that poverty is not the same as being without money. On the contrary, it is the state of having one's subsistence culture severely undermined by a money culture within which one becomes marginalised. Indigenous cultures have endured for millennia without causing social or environmental problems. What passes for "development" in the Third World has not been the solution to poverty, but a major cause of it.

A shift in perspective

We need to begin to think of global problems as symptoms of a more fundamental, underlying systemic malaise. It is this malaise that we need to identify, characterise and address seriously, otherwise all our "solutions" and policies will simply induce other problems.

The analogy with treating the symptoms of an illness is obvious. We have no difficulty in seeing how absurd it would be to ask our doctor to cure our illnesses, but only on the condition that we are allowed to continue living unhealthily. Yet we do something very similar when we insist that the "cures" to the problems of our time are not allowed to interfere with our cherished notions of perpetual economic growth, "progress", Nature as the infinite provider, and the assessment of our fellow human beings mainly in terms of their usefulness to the money-based economy.

Modern society is addicted to control, cheap energy, material growth, and consumption. But just as we cannot cure addiction to substances with palliatives, so too with our socio-economic additions. Deeply rooted beliefs have to be brought into the light for re-examination and probable replacement. These include the belief that economic logic and values will lead to socially desirable outcomes; the belief that individuals are linked to society mainly through jobs; the belief that the economy must be driven ever faster to maintain sufficient jobs; the belief that inequality and poverty can be solved by economic growth; and the belief that the materialist-scientific worldview is a satisfactory basis for the guidance of individual and collective decisions.

The challenge

To summarise, if there really is a fundamental shift in the assumptions upon which the powerful institutions of society are based, this must also imply a whole-system change, just as the assumptions of the scientific revolution led to equally profound changes. In fact, we believe that this shift is being accelerated by the growing recognition that human society is no longer sustainable in its present form.

In its most basic terms, we are witnessing a shift away from a focus on economic production and consumption towards a focus first and foremost on the growth of human beings as human beings. We believe that the world is moving towards a society in which every endeavour and every institution – commercial, judicial, political, whatever – will have as its primary function the encouragement of this central goal.

A paradigm shift is a very serious matter. It entails nothing less than re-perceiving the world. When we do this individually, it transforms our lives. When we do it collectively, it changes history.

Willis Harman PhD was a futurist who was Founding President of the Institute of Noetic Sciences. He devoted his last few years to a fundamental examination of the metaphysical foundations of modern science.

Chris Thomson PhD is author of *Full Spectrum Intelligence*.

References

- Ken Wilber: *The Great Chain of Being*. Journal of Humanistic Psychology, Vol 33, no. 3, 1993
- C.P. Snow: *Two Cultures and a Second Look*: Cambridge University Press, 1969



The Future of World Religion: A Participatory Dream

Jorge N. Ferrer

Jorge considers four possible scenarios and further develops his preferred scenario with a participatory turn.

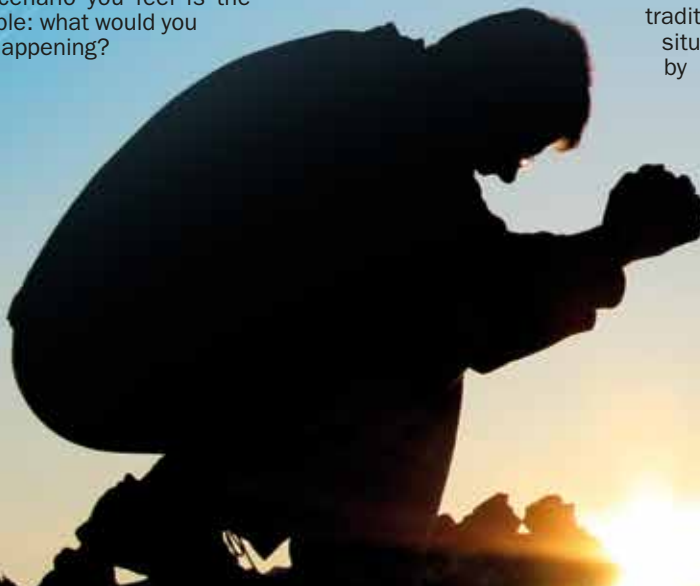
Religious globalisation, new religious movements, transnational religions, global proselytism, religious violence, multiple religious identities, ecumenical services, religious syncretism, secular and postsecular spiritualities—all these are among the many remarkable trends that shape the religious landscape of the beginning of the twenty-first century. Despite the rampant materialism still dominant in an increasingly technocratic world, it is clear that we live in times of rich spiritual diversity, proliferation, and innovation. For instance, when David B. Barret was asked almost ten years ago what he had learned about religious change in the world after several decades of research, he responded, “We have identified nine thousand and nine hundred distinct and separate religions in the world, increasing by two or three religions every day.”

Although there may be something to celebrate in this spiritual cornucopia, this apotheosis of the religious imagination can also be the source of profound uncertainty and confusion. Where is the world heading religiously speaking? Will humanity ultimately converge into one single religious credo? Or will it rather continue to diversify into countless forms of spiritual expression often at odds with one another? Alternatively, can we envision a middle path capable of reconciling the human longing for spiritual unity, on the one hand, and the developmental and evolutionary pulls toward spiritual individuation and differentiation, on the other? I believe that we can, and in this essay I offer the contours of such a vision after considering four other scenarios for the future of world religion. As we go through them, I invite you, the reader, to consider not only their plausibility but also inquire into what scenario you feel is the most desirable: what would you like to see happening?

Religion in the global village: four scenarios

The first scenario portrays the emergence of a *global religion* or single world faith for humankind. This global religion may stem from either the triumph of one spiritual tradition over the rest (e.g., Catholic Christianity or the Dalai Lama’s school of Tibetan Buddhism) or a synthesis of many or most traditions (e.g., the Baha’i faith or New Age spiritual universalism). The former possibility, historically the ambition of most religions, entails the wildly unlikely prospect that religious practitioners, except those from the “winning” tradition, would recognise the erroneous or partial nature of their beliefs and embrace the superior truth of an already existent tradition. The latter means that most traditions would ultimately come together or be integrated into one world faith embraced by all religious people, perhaps as the ultimate upshot of increased interreligious interaction. The dream of a global spirituality—however ecumenically or ideologically conceived—inspires spiritual sensibilities at work in such diverse spheres as interfaith dialogue, transpersonal psychology and integral theory, and many new religious movements.

In the second scenario, which we may call *the mutual transformation of religions*, spiritual traditions conserve their identity but are deeply and endlessly transformed through a variety of interreligious exchanges and interactions. The distinctive feature here is that, as Teilhard de Chardin believed, religious cross-pollination will lead to spiritual creative unions in which diversity is not erased but rather intensified. This vision is consistent with not only the adoption of practices from other traditions by members of different faith communities, but also the deepening or re-envisioning of one’s own tradition in light of other religious perspectives—a situation that, when mutual, was aptly described by Arvind Sharma as “reciprocal illumination.”



A historical precursor of this possibility can be found in religious syncretism (i.e., the mixture of two or more traditions), such as the Haitian Vodou's blending of Christianity and African traditions or the Brazilian Santo Daime Church's incorporation of the indigenous use of ayahuasca into a Christian container. Today this religious cross-fertilisation is visibly taking place in interfaith dialogue, the New Age movement, and a multitude of eclectic and integrative spiritual groups.

Within this scenario, I would also locate the growing phenomenon of "multiple religious participation," in which an individual partakes in the practices and belief systems of more than one tradition, leading to a "multiple" or "hyphenated" religious identity, such as Jewish-Buddhist, Hindu-Christian, Buddhist-Taoist, and so forth. Also related to this picture is the ongoing renewal of many religious traditions through cross-cultural encounters—a trend that can be clearly discerned in contemporary American Buddhism, Neo-Hindu applied spiritualities, and the novel social understandings of salvation in Asia influenced by Western values. An increasingly fashionable way to speak of all these richly transformative interactions, taken today by many to be historically normative, is in terms of a "cosmological hybridisation" that is not only doctrinal (of spiritual teaching and beliefs), but also sometimes practical (of spiritual techniques) and even visionary (of spiritual ontologies and cosmologies). "We are all hybrids," is the new motto of this emerging spiritual ethos.

A third scenario stems from the affirmation of an *interspiritual wisdom* or a number of spiritual principles, teachings, and values endorsed by all religious groups and traditions. Hans Küng's proposal for a global ethics heralded this possibility, but it was the late Christian author Wayne Teasdale who offered its most compelling articulation in terms of a universal mysticism grounded in the practice of "interspirituality," or the sharing of

ultimate experiences across traditions. Specifically, Teasdale identified nine elements of such interspiritual wisdom: moral capacity, solidarity with all living beings, deep nonviolence, spiritual practice, humility, mature self-knowledge, simplicity of life, selfless service and compassionate action, and prophetic voice. Developing a similar intuition is Beverly Lanzetta's proposal for an "intercontemplative" global spirituality that affirms the interdependence of spiritual principles and can give birth to new spiritual paths. Also related is Robert Forman's articulation of a "trans-traditional spirituality" that feeds on the teachings of all religious traditions but is not restricted by the confines of any particular credo.

The last scenario, *spirituality without religion*, comprises an impressive number of contemporary developments—from secular to postmodern and from naturalistic to New Age spiritualities—that advocate for the cultivation of a spiritual life free from traditional religious dogmas and/or transcendent or supernatural beliefs. Two prominent trends here are postmodern spiritualities and the New Age movement. Though the former reject or remain agnostic about supernatural or transcendent sources of religion and the latter tends to uncritically accept them, both join hands in their affirmation of the primacy of individual choice and experience, as well as in their criticism of many received religious doctrines and authoritarian institutions. Calls for a democratisation of spirit, a direct path to the divine, or the reclaiming of the individual's inner spiritual authority are intimately linked with this scenario. We could also situate here most forms of religious naturalism, modern religious quests, secular surrogates for religion, and postsecular spiritualities. Expressions such as "spiritual but not religious," "religion without religion," and "believing without belonging" capture well the essential character of this orientation.

A Participatory Dream

As should be obvious, with the possible exception of a hegemonic global religion, the above scenarios are not mutually exclusive, and it is likely that they will all shape the future of world religion in the twenty-first century. And yet, there is something intuitively appealing in the search for spiritual unity, and here I would like to outline how a participatory perspective addresses this concern without hampering the arguably wholesome impulses toward religious diversification and spiritual individuation at play in our times.

Participatory approaches understand religious worlds and experiences as co-created events emerging from the interaction of the entire range of human faculties (the rational, imaginal, somatic, erotic, aesthetic, and so forth) and a dynamic and undetermined mystery, spiritual power, and/or generative force of life or the cosmos. To embrace our participatory role in spiritual knowing may lead to a shift from searching for spiritual unity in a global religion organised around a single vision to recognising an already existent spiritual human family that branches out in numerous directions from the same creative source. In other words, religious people may be able to find their longed-for unity not so much in an all-encompassing megasystem or superreligion, but in their common roots—that is, in that deep bond constituted by the undetermined creative power of spirit, life, and/or the cosmos in which all traditions participate in the bringing forth of their spiritual insights and cosmologies. The recognition of these shared roots naturally paves the way for a global approach to religious diversity that preserves a deep sense of communion across differences.

An important practical consequence of this approach is that, if religious people were to adopt it, they could then, like members of a healthy family, stop attempting to impose their particular beliefs on others and might instead become a supportive force for practitioners' spiritual individuation both within and outside their traditions. This mutual empowerment of spiritual creativity may lead to the emergence not only of a human community formed by fully differentiated spiritual individuals, but also of a rich variety of coherent spiritual perspectives that can be (potentially) equally aligned to the mystery. In this context, different spiritual perspectives can mutually illuminate and transform one another through unlimited doctrinal, practical, and visionary hybridisations. And this access to an increased number of spiritual insights, practices, and visionary worlds may in turn foster further human spiritual individuation as it expands the range of choices available for individuals in the co-creation of their spiritual paths.

It is important here to distinguish sharply between the modern hyper-individualistic mental ego and the participatory selfhood forged in the sacred fire of spiritual individuation. Whereas the disembodied modern self is plagued by alienation, dissociation, and narcissism, a spiritually individuated person has an embodied, integrated, connected, and permeable identity whose high degree of differentiation, far from being isolating, actually allows him or her to enter into a deeply conscious communion with others, nature, and the multidimensional cosmos.

In this scenario, it will no longer be a contested issue whether practitioners endorse a theistic, nondual, or naturalistic

account of the mystery, or whether their chosen path of spiritual cultivation is meditation, social engagement, conscious parenting, entheogenic shamanism, or communion with nature. (Of course, it may be desirable to complement each pathway with practices that cultivate other human potentials). The new spiritual bottom line, in contrast, will be the degree into which each spiritual path fosters both an overcoming of self-centeredness and a fully embodied integration that make us not only more sensitive to the needs of others, nature, and the world, but also more effective agents of cultural and planetary transformation in whatever contexts and measure life or spirit calls us to work.

The affirmation of our shared spiritual family naturally calls for the articulation of a common, contextually sensitive global ethics. This global ethics, however, cannot arise exclusively out of our highly ambiguous moral religious past, but needs to be crafted in the tapestry of contemporary interfaith interactions, comparative religious ethics, cross-cultural dialogue on global human rights, and cooperative spiritual inquiry. In other words, it is likely that any viable future global ethics will be grounded not only in our spiritual history, but also in our critical reflection on such history in the context of our present-day moral intuitions (for example, about the pitfalls of religious dogmatism, fanaticism, narcissism, and dissociation). Besides its obvious relevance for regulating cross-cultural and interreligious conflicts, the adoption of global guidelines—including guidelines for dealing with disagreement—seems crucial to address some of the most challenging issues of our global village, such as the exploitation of women and children, the increasing polarisation of rich and poor, the environmental crisis, xenophobic responses to cultural and ethnic diversity, and unfairness in international business.

To close this essay in a more hopeful note, I propose that, situated at the creative nexus between the mystery's generative power and our own psycho-cultural dispositions, spiritually individuated persons might become unique embodiments of the mystery, capable of co-creating novel spiritual understandings, practices, and even expanded states of freedom. If we accept this approach, it is plausible to conjecture that our religious future may bear witness to a greater-than-ever plurality of visionary and existential developments grounded in a deeply felt sense of spiritual unity. Such spiritual unity, however, may not be found in the heavens (i.e., in mental, visionary, or even mystical visions) but deep down into the earth (i.e., in our embodied creative connection with our shared roots). This account would be consistent with a view of the mystery or the cosmos as moving from a primordial state of undifferentiated unity toward one of infinite differentiation-in-communion.

If you let me wear my optimistic visionary hat just a bit longer, I would say that the future of world religion will be shaped by spiritually individuated persons engaged in processes of cosmological hybridisation in the context of a common spiritual family that honours a global order of respect and civility. This is the scenario I would personally like to see emerging in the world and that I am committed to help actualise.

Note: This essay is based on themes more fully developed in Jorge N. Ferrer's new book, *Participation and the Mystery: Transpersonal Essays in Psychology, Education, and Religion* (State University of New York Press, 2017)

Jorge N. Ferrer, Ph.D. is core faculty of the department of East-West Psychology at the California Institute of Integral Studies (CIIS), San Francisco. He is the author of *Revisioning Transpersonal Theory: A Participatory Vision of Human Spirituality* (SUNY Press, 2002) and *Participation and the Mystery: Transpersonal Essays in Psychology, Education, and Religion* (SUNY Press, 2017), as well as the coeditor of *The Participatory Turn: Spirituality, Mysticism, Religious Studies* (SUNY Press, 2008). In 2009, he became an advisor to the organisation Religions for Peace at the United Nations on a research project aimed at solving global interreligious conflict. He was born in Barcelona, Spain, and can be contacted at jferrer@ciis.edu.



Mystics and Scientists in the Twenty-First Century: Science and Spirituality Revisited

Fritjof Capra

*40th Anniversary Mystics and Scientists Conference
Horsley Park, Surrey, 7-9 April, 2017*

Introduction

I am sorry I can't be with you at this unique anniversary conference, but I'm really happy to be able to share some thoughts with you in this way. What I'd like to share with you is my view of the relationship between science and spirituality, and how it has evolved over the last 50 years or so.

I was trained as a physicist and spent twenty years, from 1965-85, doing research in theoretical high energy physics. From my early student years, I was fascinated by the dramatic changes of concepts and ideas that occurred in physics during the first three decades of the twentieth century. At the age of nineteen, I read about this revolutionary period in science for the first time in a book by Werner Heisenberg, one of the founders of quantum theory. The book, which has since become a classic, is called *Physics and Philosophy*. In it Heisenberg gives a vivid account of the experience of a small group of physicists — Niels Bohr, Erwin Schrödinger, Wolfgang Pauli, and others — who were the first to explore physical phenomena involving atoms and subatomic particles, which brought them in contact with a strange and unexpected world. In their struggle to grasp this new reality, those scientists became painfully aware that their basic concepts, their language, and their whole way of thinking were inadequate to describe atomic phenomena. Their problems were not merely intellectual, but amounted to an intense emotional and, one could say, even existential crisis. It took them a long time to overcome this crisis, and in the end they were rewarded with deep insights into the nature of matter and its relation to the human mind.

When I read Heisenberg's book as a young student in Vienna, I understood probably less than half of it, but the book became my companion throughout my career as a physicist and had a profound impact on my thinking. It prepared the ground for my understanding of the

profound change of worldviews, or paradigms, that is now happening in all the sciences and throughout society — a change from the mechanistic worldview of Descartes and Newton to a holistic and ecological view.

I received my Ph.D. in theoretical physics from the University of Vienna in 1966, spent two years at the University of Paris, and then moved to the University of California. During the next two years, I experienced the so-called counterculture in California as a profound and radical personal transformation, which included a deep interest in Eastern spiritual traditions, the practice of meditation, and a strong sense of empowerment.

The Dance of Shiva

During that time, I had a unique experience that set me on the road that led to the writing of my first and still best known book, *The Tao of Physics*. I was sitting by the ocean one late summer afternoon, watching the waves rolling in and feeling the rhythm of my breathing, when I suddenly became aware of my whole environment as being engaged in a gigantic cosmic dance. Being a physicist, I knew that the sand, rocks, water, and air around me were made of vibrating molecules and atoms, and that these consisted of particles which interacted with one another by creating and destroying other particles. I knew also that the Earth's atmosphere was continually bombarded by showers of so-called "cosmic rays" — particles of high energy undergoing multiple collisions as they penetrate the air.



All this was familiar to me from my research in high-energy physics, but until that moment I had only experienced it through graphs, diagrams, and mathematical theories. As I sat on that beach in meditation, my former experiences came to life. I “saw” cascades of energy coming down from outer space, in which particles were created and destroyed in rhythmic pulses. I “saw” the atoms of the elements and those of my body participating in this cosmic dance of energy. I felt its rhythm and I “heard” its sound; and that moment I *knew* that this was the Dance of Shiva, the Lord of Dancers worshipped in Hinduism.

At that time, I had already become very interested in Eastern mysticism and had begun to see some striking parallels to modern physics. I had been particularly attracted to the puzzling aspects of Zen Buddhism which reminded me of the puzzles in quantum theory, described so vividly in Heisenberg’s book. At first, however, relating physics and mysticism was a purely intellectual exercise. It took me several years to overcome the gap between rational, analytical thinking and meditative consciousness; to experience how the mind can flow freely; how spiritual insights come on their own, without any effort, emerging from the depth of consciousness.

The unforgettable experience of the Dance of Shiva was followed by many similar, though less powerful, experiences; and gradually I came to realise that modern physics leads us to a consistent view of the world that is harmonious with ancient Eastern wisdom. I took many notes over the years, wrote a few articles about the parallels I kept discovering, and finally I summarised my discoveries in *The Tao of Physics*, published first in London and Berkeley in 1975 and now available in over 40 editions and over 20 languages around the world.

Science and religion

At first glance, it seems strange that one could draw parallels between science and mysticism, because scientists and spiritual teachers pursue very different goals. While the purpose of the former is to find explanations of natural phenomena, that of the latter is to change a person’s self and way of life. However, in their different pursuits, both are led to make statements about the nature of reality that can be compared.

Before I go into more detail, I need to say a few words about religion. The view of science and religion as a dichotomy has a long history, especially in the Christian tradition, and has recently been revived in several books written by scientists like Stephen Jay Gould, Richard Dawkins, and others. On the other hand, there are many scientists who see no intrinsic dichotomy between science and religion, or science and spirituality. At the very core of this confusing situation, in my opinion, lies the failure of many authors to distinguish clearly between spirituality and religion.

To understand the nature of spirituality, it is useful to begin with the root meaning of the word “spirit.” The Latin *spiritus* means “breath”; and interestingly this is also true for the related Latin word *anima*, the Greek *psyche*, and the Sanskrit *atman*. The common meaning of these key terms indicates that the original meaning of spirit, and of soul, in many ancient philosophical and religious traditions, in the West as well as in the East, is that of the breath of life. Spirit — the breath of life — is what we have in common with all living beings. It nourishes us and keeps us alive.

Spirituality is usually understood as a way of being that flows from a certain profound experience of reality, which is known as “mystical,” “religious,” or “spiritual” experience. There are numerous descriptions of this experience in the literature of the world’s religions, which tend to agree that it is a direct, non-intellectual experience of reality with some fundamental characteristics that are independent of cultural and historical contexts.

In accordance with the original meaning of spirit as the breath of life, spiritual experience can be described as a non-ordinary experience of reality during moments of heightened aliveness. Our spiritual moments are moments when we feel intensely alive. The aliveness felt during such a “peak experience,” as psychologist Abraham Maslow called it, involves not only the body but also the mind. Buddhists refer to this heightened mental alertness as “mindfulness,” and they emphasise that mindfulness is deeply rooted in the body. Spiritual experience is an experience of aliveness of mind and body as a unity.

Moreover, this experience of unity transcends not only the separation of mind and body, but also the separation of self and world. The central awareness in these spiritual moments is a profound sense of oneness with all, a sense of belonging to the universe as a whole. This sense of oneness with the natural world is fully borne out by modern physics, and in fact by modern science as a whole.

However, this is not necessarily true for religion, and here it becomes important to distinguish between the two. Spirituality is a way of being grounded in a certain experience of reality that is independent of cultural and historical contexts. Religion is the organised attempt to understand spiritual experience, to interpret it within a particular historical and cultural context, and to use this interpretation as the source of moral guidelines for the religious community.

In many spiritual traditions — for example, in the various schools of Buddhism — the mystical experience is always primary; its descriptions and interpretations are considered secondary and tentative, insufficient to fully describe the spiritual experience. In a way, these descriptions are not unlike the limited and approximate models in science, which are always subject to further modifications and improvements.

In the history of Christianity, by contrast, theological statements about the nature of the world, or about human nature, were often considered as literal truths, and any attempt to question or modify them was deemed heretical. This rigid position of the Church led to the well-known conflicts between science and fundamentalist Christianity, which have continued to the present day.

In fact, fundamentalist attitudes are not limited to religious leaders. Scientists, too, can be fundamentalists, forgetting that all their models and theories are limited and approximate, and ignoring the important role of metaphors — in religion as well as in science. When that happens, the debate between scientists and religious leaders soon turns into a *dialogue des sourds*, as the French call it, a “dialogue of the deaf.”

My main thesis

Now let me summarise the main thesis of *The Tao of Physics*. My main thesis is that the approaches of physicists and mystics, even though they seem at first quite different, share some important characteristics. To begin with, their method is thoroughly empirical. Physicists derive their knowledge from experiments; mystics from meditative insights. Both are observations, and in both fields these observations are acknowledged as the only source of knowledge.

The objects of observation are of course very different in the two cases. Mystics look within and explore their consciousness at various levels, including the physical phenomena associated with the mind’s embodiment. Physicists, by contrast, begin their inquiry into the essential nature of things by studying the material world. Exploring ever deeper realms of matter, they become aware of the essential unity of all natural phenomena. More than that, they also realise that they themselves and their consciousness are an integral part of this unity. Thus the mystic and the physicist arrive at the same conclusion; one starting from the inner realm, the other from the outer world. The harmony

between their views confirms the ancient Indian wisdom that *brahman*, the ultimate reality without, is identical to *atman*, the reality within.

A further important similarity between the ways of the physicist and the mystic is the fact that their observations take place in realms that are inaccessible to the ordinary senses. In modern physics, these are the realms of the atomic and subatomic world; in mysticism, they are non-ordinary states of consciousness in which the everyday sensory world is transcended. In both cases, access to these non-ordinary levels of experience is possible only after long years of training within a rigorous discipline, and in both fields the “experts” assert that their observations often defy expressions in ordinary language.

Impact of the book

Over the last forty years, *The Tao of Physics* has been received with an enthusiasm that went beyond my wildest expectations. This tremendous response has had a strong impact on my work and my life. I have traveled extensively, lecturing to professional and lay audiences in Europe, North and South America, and Asia; and discussing the implications of the so-called “new physics” with men and women from all walks of life. Since then, I have written several more books, but still today I encounter people all over the world who tell me: “I love your book” or “Your book has changed my life.” And I don’t need to ask which book they mean. They mean *The Tao of Physics*.

Again and again, I have witnessed how this book and my lectures about it generate a strong resonance in people, and I have come to understand this enthusiastic reception in terms of the broader cultural context of my work. Again and again, men and women would write to me, or would tell me after a lecture: “You have expressed something I have felt for a long time without being able to put it into words.” These were generally not scientists, nor were they mystics. They were ordinary people, and yet they were extraordinary: artists, grandmothers, businessmen, teachers, farmers, nurses; people of all ages, just as many over fifty as under. Quite a few have been old people, and the most moving letters were from women and men over eighty, and in two or three cases even over ninety!

What did *The Tao of Physics* touch off in all these people? What was it they had experienced themselves? I have come to realise that the recognition of the similarities between modern physics and Eastern mysticism is part of a much larger movement, of a fundamental change of worldviews, or paradigms, in science and society, which is now happening throughout the world and which amounts to a profound cultural transformation. This transformation, this profound change of consciousness, is what so many people have felt intuitively over the last four decades, and this is why *The Tao of Physics* has struck such a responsive chord.

From physics to the life sciences

During my lectures and seminars, men and women from all walks of life often told me that a similar change of paradigms was now happening in their various fields. This led me to expand my focus, and in my subsequent books I explored the change of paradigms in various other fields — in biology, medicine, psychology, economics, management, and so on.

To connect the conceptual changes in science with the broader change of worldview and values in society, I had to go beyond physics and look for a broader conceptual framework. In doing so, I realised that our major social issues

— health, education, human rights, social justice, political power, protection of the environment, the management of business organisations, and so on — all have to do with living systems; with individual human beings, social systems, and ecosystems.

With this realisation, my research interest shifted from physics to the life sciences, and over the last thirty years I put together the broader conceptual framework I was looking for, using insights from the theory of living systems, complexity theory, and ecology. It is a framework that integrates four dimensions of life: the biological, the cognitive, the social, and the ecological dimension. I presented summaries of this framework, as it evolved, in several books. My final synthesis was published by Cambridge University Press in a multidisciplinary textbook, titled *The Systems View of Life: A Unifying Vision*, which I coauthored with Pier Luigi Luisi, professor of biochemistry in Rome.

Extending the parallels

With my change of perspective from physics to the life sciences, I now see future elaborations of the thesis I presented in *The Tao of Physics* not so much in further elaborating the parallels between physics and mysticism, but rather in extending these parallels to other sciences. In fact, this is already being done.

After the publication of *The Tao of Physics* in 1975, numerous books appeared in which physicists and other scientists presented similar explorations of the parallels between physics and mysticism. Other authors extended their inquiries beyond physics, finding similarities between Eastern thought and certain ideas about free will; death and birth; and the nature of life, mind, consciousness, and evolution. Moreover, the same kinds of parallels have been drawn also to Western mystical traditions. Some of these explorations were initiated by Eastern spiritual teachers. The Dalai Lama, in particular, has held dialogues with Western scientists on numerous occasions.

The extensive explorations of the relationships between science and spirituality over the past three decades have made it evident that the sense of oneness, which is the key characteristic of spiritual experience, is fully confirmed by the understanding of reality in contemporary science. Hence, there are numerous similarities between the worldviews of mystics and spiritual teachers — both Eastern and Western — and the holistic, or systemic, conception of nature that is now being developed in several scientific disciplines.

The awareness of being connected with all of nature is particularly strong in ecology. Connectedness, relationship, and interdependence are fundamental concepts of ecology; and connectedness, relationship, and belonging are also the essence of spiritual experience. I believe therefore that ecology — and in particular the philosophical school of deep ecology, is an ideal bridge between science and spirituality.

When we look at the world around us, we find that we are not thrown into chaos and randomness but are part of a great order, a grand symphony of life. Every molecule in our body was once a part of previous bodies — living or nonliving — and will be a part of future bodies. In this sense, our body will not die but will live on, again and again, because life lives on. Moreover, we share not only life’s molecules, but also its basic principles of organisation with the rest of the living world. Indeed, we belong to the universe, and this experience of belonging can make our lives profoundly meaningful.

Thank you!

Fritjof Capra, Ph.D., physicist and systems theorist, is a founding director of the Center for Ecoliteracy in Berkeley, California. He serves on the faculty of the Amana-Key executive education program in São Paulo, Brazil. He is a Fellow of Schumacher College (UK) and serves on the Council of Earth Charter International. Capra is the author of several international bestsellers, including *The Tao of Physics* (1975), *The Web of Life* (1996), and *The Hidden Connections* (2002). He is co-author, with Pier Luigi Luisi, of the multidisciplinary textbook, *The Systems View of Life* (Cambridge University Press, 2014). Capra’s new online course (www.capracourse.net) is based on his textbook.

EMERGENT SPIRITUALITY

T!M FREKE

based on his latest book 'soul story' pioneering philosopher T!M FREKE explores the essence of a new worldview he calls 'emergent spirituality', and suggests we need to make a radical shift in our understanding of both science and spirituality

to make his ideas as lucid as possible, in both the book and this article, he has adopted a radically minimalist form of presentation, without conventional paragraphs, full stops and capital letters at the beginning of sentences

the intellectual mainstream in western culture has fallen under the spell of a depressingly bleak worldview

the great religious theologies that gave life meaning in the past have crumbled under sceptical scrutiny, so we've put our faith in science

and this has left us adrift in a cold cosmos that exists for no reason ... living lives with no real significance ... fearing the finality of death

from an early age i've experienced profound states of spiritual awakening, which have led to a heartfelt conviction that our lives are profoundly meaningful and that death is not the end

but, as a philosopher who values rational doubt, i'm forced to acknowledge that the astonishing discoveries of science seem to completely undermine such spiritual intuitions

it's hard to see our human lives as significant in a vast universe comprised of 100 billion galaxies

now we know that life arose through a process of evolution that entailed 180 million years of lumbering dinosaurs, the intuition that existence has a deep spiritual purpose seems absurd

if consciousness is just a by-product of the brain, then the idea of the immortal soul is just a wish-fulfilling fantasy

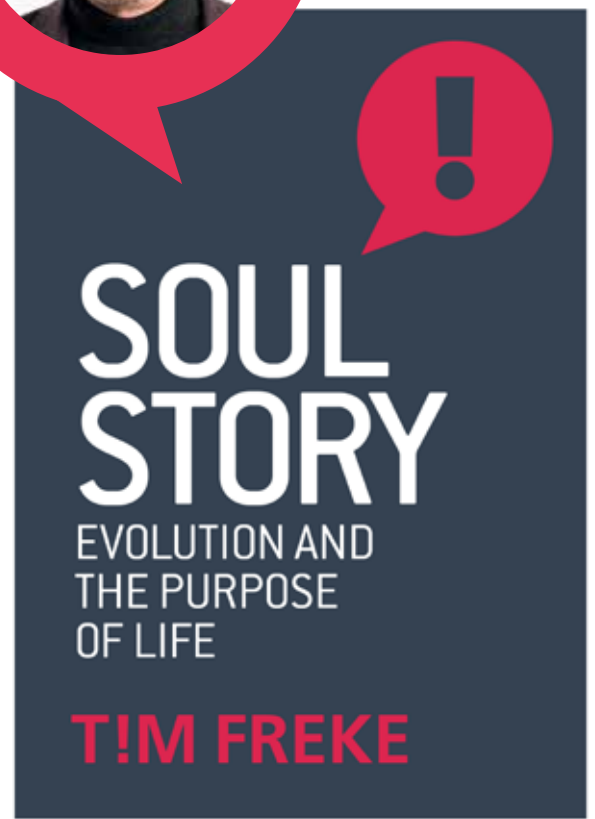
i experience my life as a meaningful *story*, with moments of extraordinary magic and astonishing synchronicities, in which my moral choices feel of huge importance

but most scientists claim the universe has evolved by chance ... the apparent magic of life can be explained through material causality ... and freedom of choice is an illusion, because everything is determined by physics

it can seem as if we face a choice between the bleak vision of existence offered to us by mainstream science and a rationally unsustainable spiritual understanding of life

in the face of this dilemma, i want to propose a new philosophy i call 'emergent spirituality', which reconciles our scientific knowledge with our spiritual intuitions, to reveal the purpose of the cosmos and the meaning of our individual lives

in my book *soul story* i present a comprehensive account of this worldview, which i'd like to introduce to you in this article by exploring some of its foundational ideas



EVERYTHING HAS EVOLVED

the greatest triumph of science is that it's given us a truly awe-inspiring cosmology

we now have a powerful explanatory narrative that tells the story of the evolution of the universe ... from the beginning of time through to the emergence of human beings, such as ourselves, contemplating the nature of existence

it seems to me that in the broadest terms this process of evolution has gone through three great stages

first the emergence of increasingly complex forms of matter ... followed by the emergence of the diversity of life ... and then *the emergence of psyche*

'psyche' is the ancient greek word for 'soul' ... and it refers to what we also call the 'mind' or the 'imagination'

the nature of the psyche or soul is obvious if you recognise that right now you are conscious of two distinctly different forms of experience

you're conscious of the world revealed by the senses ... and you're conscious of a non-physical dimension, populated by thoughts and images

at some point in the story of the universe, lifeforms became not only conscious of the material world, but also conscious of immaterial psyche or soul

soul is a whole new dimension of existence that has emerged through the evolutionary process

as you read this article you and i are connecting in both the material world and the non-physical soul-dimension

as bodies we're connecting through these marks on the page that i'm making and you're viewing

as souls we're connecting through the meaning of these words, which doesn't exist in the material world

so this is how i've come to see things ...

the scientific theory of evolution started with the idea that biological species have evolved through the process of natural selection

then physicists realized that the whole universe had evolved from the big bang ... so we came to understand there is a pre-biological phase of physical evolution

now I suggest we need to understand there is a post-biological phase of soul evolution

just as the emergence of life from inanimate matter marked a distinct new phase of evolution, so the emergence of soul from biological life marked a distinct new evolutionary phase, with its own unique characteristics

the physical phase of evolution saw the emergence of atoms and chemicals for the first time

the biological phase of evolution saw the emergence of plants and animals for the first time

i suggest that the soul phase of evolution has also seen the emergence of entirely new aspects of reality ... such as meaning, magic and immortality

so an essential idea at the heart of the philosophy of 'emergent spirituality' is this ...

everything has evolved ... including those qualities of existence we think of as 'spiritual'

THE EVOLVING TIMESTREAM

it seems to me that to really understand the process of evolution, we need to take a fresh look at the nature of time

people sometimes say that 'time is an illusion', but experience would be impossible without time

when i examine reality as it presents itself to me in the moment, i find a stream of experiences that are changing over time ... which i call the 'timestream'

so i want to suggest that, in our immediate experience, reality is the constantly evolving timestream

usually we think of time as something that *passes*, but i want to suggest an alternative metaphor, because it seems to me that time *accumulates*

there is more past now than there was when you started reading this article

the timestream is the past accumulating as new possibilities are realized in each new moment

the present is arising from all that has already happened

the past hasn't passed away, because all that has previously occurred ... from the formation of the universe, through the evolution of life, to me writing this article ... is implicit in the present moment

what has happened in the past hasn't gone, because once something has occurred it's happened for all time and can't be changed

if this weren't true history and justice would be impossible

as would the simplest of things, such as arguing over who left the lid off the toothpaste

physics has constantly challenged us to see beyond our naïve, common-sense perception of a concrete material reality

in that spirit, i'm suggesting we need to understand that time is not something reality is in, because *time is what reality is made of*

the universe is made of the past, because it's the accumulation of all that's happened from the 'big bang' to this moment

it's hard to say what existed before the 'big bang', except that the source of all that exists must be the *potentiality* for everything that has ever been and ever will be

so it seems to me that the 'big bang' was when this primal potentiality began a process of realising itself as the evolving timestream

over the course of 13.8 billion years the potentiality has become realised on ever more emergent levels ... evolving from basic matter, through organic life, to the soul dimension

existence is the evolving timestream realising ever more emergent potentials, which don't exist on less emergent levels of existence

for example, at the physical level of emergence there's no life and death, which only emerge in the biological phase of evolution

in a comparable way, on the biological level of emergence there is no meaning, magic or immortality ... because these spiritual potentialities only become realised with the evolution of soul

A NEW WORLDVIEW

i began this article by observing that science and spirituality seem incompatible, but the philosophy of 'emergent spirituality' shows they are actually complementary, because they're concerned with different levels of emergence

science deals with the physical and biological phases of evolution

spirituality is concerned with the more emergent soul phase of evolution

this new worldview allows us to integrate our scientific knowledge with our spiritual wisdom to form one coherent account of the evolution of existence ... but it challenges both science and spirituality to think in new ways

it requires science to acknowledge that, after the physical and biological phases of the evolutionary process, there is a distinct soul phase of evolution ... which has seen the emergence of the non-material qualities of existence that give our human lives their deep meaning

it requires spirituality to accept that all forms of existence are emergent ... so that the soul-dimension is no longer seen as existing eternally outside time, but understood as emerging into existence through the magnificent process of cosmic evolution

TIM FREKE is the author of 35 books, translated into more than 15 languages, including '*the jesus mysteries*' on gnostic christianity, which was an amazon top 6 bestseller and a 'book of the year' in the daily telegraph



The “Attitude of Incredulity”

John Poynton

Recently, in a published debate between Rupert Sheldrake and Michael Schermer (1), Schermer opined, “In general, over the course of a century of research on psi, the tighter the controls on the experimental conditions, the weaker the psi effects seem to become until they disappear entirely. This is a very strong indicator that ESP is not real.” And then, “there is no explanatory theory for how psi works. Until proponents can explain how thoughts generated by neurons in the sender’s brain can pass through the skull and into the brain of the receiver, skepticism is the appropriate response.”

Sheldrake, in his response, maintained that Schermer’s first opinion is simply not true, and secondly, that “There are already several hypotheses as to how psi may work, but they offend your authoritarian instincts because they go beyond existing scientific orthodoxy.” This point could have been made more strongly: Schermer’s view is encased in a one-level naturalism that assumes -without any supporting evidence - that thoughts are generated by neurons, and that there would be some physical transmission of thoughts.

One could say that the debate laboured over trampled ground without indicating anything more than deadlock. Sheldrake remarked, “I wish there was a way to move our argument forward.” Regrettably there is nothing new in this stalemate; one may think back to the oft-quoted passage from the inaugural presidential address to the Society for Psychical Research, delivered in 1882 by Henry Sidgwick (2): “I say it is a scandal that the dispute as to the reality of [psi] phenomena should still be going on, that so many competent witnesses should have declared their belief in them, that so many others should be profoundly interested in having this question determined, and yet the educated world, as a body, should still be simply in the attitude of incredulity.”

The matter of evidence

A man of great philosophical eminence, Sidgwick evidently had enough confidence in human rationality to “trust to the mass of evidence for conviction” to demolish the attitude of incredulity. In his second address of 1882 (3) he declared that if doubters in telepathy “will not yield to half-a-dozen decisive experiments by investigators of trained intelligence and hitherto unquestioned probity, let us try to give them half-a-dozen more recorded by other witnesses; if a dozen will not do, let us try to give them more; if a score will not do, let us make up the tale to fifty. The time and trouble will not be thrown away if only we can attain the end.”

The “mass of evidence” is now enormous and steadily increasing (4). Yet the “scandal” is still with us; denial, debunking is the ruling fashion of the day, from Wikipedia to “skeptical” publications. So while not downplaying the importance Sidgwick placed on facts, was there something that he missed?



He recognised that “Scientific incredulity has been so long in growing, and has so many and so strong roots, that we shall only kill it ... by burying it alive under a heap of facts.” (2). But the many and strong roots appeared to him to be something that objective and rational science could deal with if one just piled fact upon fact at a purely empirical level. He seemed to have missed what Abraham Maslow in 1966 termed “cognitive pathologies” (5). When a scientist finds himself out of depth or without bearings he will, Maslow wrote, be found “desperately and stubbornly hanging on to a generalization, in spite of new information that contradicts it.” It is a prime source of scientific incredulity.

Cognitive pathology

That the incredulity has many and strong roots could suggest some even deeper cognitive pathology than just the reaction of being faced with something new. It has to do with culture, taste, history, a kind of background dissonance with psi phenomena. One might have expected Sidgwick as a philosopher to tackle this directly, yet he appeared to have discussed it in only two places. The first is in his second presidential address (3). He considered a notion that aversion to psi phenomena is hard-wired in the brain (as we would now term it). This aversive notion appeared in an article in the *Pall Mall Gazette* which “urged its readers to abstain from enquiring into ghost stories on account of the dangerous tendency to give them credence which, on the principles of evolution, must be held to exist in our brains.”

The article declared that we must starve such “morbid fibres” in the brain “by steadily refusing them the slightest nutriment in the way of apparent evidence... The scientific attitude can only be maintained by careful abstention from dangerous trains of thought.”

We still hear something like this today, and Sidgwick’s comment was that it is “the exact counterpart of the dissuasions which certain unwise defenders of religious orthodoxy, a generation ago, used to urge against the examination of the evidences of Christianity. They told us that owing to the inherited corruption of the human heart we had proneness to wrong belief which could only be resisted by ‘steadily neglecting to develop’ it; that we must keep clear of the pitch of free-thinking if we would avoid defilement; that, in short, the *religious* ‘attitude can only be preserved by careful abstention from dangerous trains of thought.’”

He recalled the “indignation with which our scientific teachers then repudiated these well-meant warnings, as involving disloyalty to the sacred cause of truth.” Yet they themselves were doing exactly the same thing with their own “obstinate incredulity” regarding psychical research. Sidgwick’s comment: “I thought how the whirligig of time brings round his revenges and how the new professor is ‘but the old priest writ large’ in a brand-new scientific jargon.” By no means has time’s whirligig stopped spinning.

This cognitive pathology is as relevant to the present as it was a hundred and thirty years ago - even to neurological fantasy, which has its present counterparts. But it does bring into question Sidgwick’s belief that the attitude of incredulity can be buried alive under a heap of facts. If it is hard-wired, then we have to fall back on the adage that change comes about in science only through the funerals of the old guard.

The legacy of Kant

Putting aside neurological fantasies, one still has to ask why it is that the attitude of incredulity exists and persists. Sidgwick touched on the question in a set of posthumously published lectures on Immanuel Kant (6). The most influential of the eighteenth century Enlightenment philosophers, Kant’s anti-psi stance has cast a long shadow over psychical research. Sidgwick noted that Kant viewed telepathy as belonging to “concepts the possibility of which has nothing to rest on, because it is not founded on experience and its known laws.” Sidgwick’s comment was that Kant “does not exactly say that telepathy, etc., is impossible, but only that its possibility has nothing to rest on and cannot be tested.”

Kant could have set up experiments to do some testing, as did the SPR founders. But it seems that in Enlightenment times it was not the fashion to engage in empirical tests of psychic claims; reason should have priority over experience. This could seem a betrayal of true enlightenment. Kant declared in a document of 1784, “All spirits and ghosts, apparitions, dream interpretations, precognitions of the future, sympathy of souls are altogether a most objectionable delusion, for it does not allow itself to be explained through any rule or through comparative observations ... and even if real ghosts exist, a rational person must still not believe in them, because it corrupts all use of reason.”(7).

This seems as unenlightened as the *Pall Mall Gazette* advice about “careful abstention from dangerous trains of thought”. Kant’s idea of “a world not visible to us now but hoped for” (7) was central to his moral philosophy, yet, far from welcoming any empirical investigation into immortality, he rejected it in keeping with the attitude of the times. This is shown in his attack on the scientist-turned-seer Emanuel Swedenborg, who described visits to other worlds and conversing with spirits of “dead” people. Despite Swedenborg declaring his experiences to be *ex auditu et visis*, from hearing and seeing, Kant saw them as “fairy tales that a rational man hesitates to bear with patience.”(7).

All this is covered in an invaluable study of Kant’s thinking by Gregory Johnson (7). Apart from the cognitive pathology, Johnson pointed out that Kant’s attack on Swedenborg can be seen as a smear campaign that suited him. Swedenborg’s work could be dismissed either as objectionable medieval occultism or as Christian heresy, and for Kant, attack would help establish his position in academe as a critical thinker by associating himself with the sceptical tenets and attitudes of the times. This debunking strategy is still successfully followed to this day. The attitude of incredulity pays off.

What to do about it?

Then what is to be done about this “scandal”? Sidgwick undoubtedly was correct in maintaining that facts are the foundation of psychical research as a science. But a different

tactic needs to be used against the powerful Kantian legacy that a “rational person” must not believe in psi phenomena “because it corrupts all use of reason” (7).

It was an Enlightenment ideal to glorify “human reason”, but if reason is placed above raw observation and experience then what is there to distinguish it from prejudice and dogmatism? William James attempted to base philosophy on experience rather than reason, but unreformed thinking has continued in the cramping application of the “iron rule of the mechanistic regime”, decried by Jan Smuts in his seminal *Holism and Evolution* (8).

It seems that until we study and understand deeply the attitude of incredulity, there is little chance of resolving what grieved Sidgwick as the “dispute as to the reality of [psi] phenomena”, or find “a way to move our argument forward,” as Sheldrake wished. In a recent paper in the *Journal* of the SPR, Harvey Irwin asked, “Why, then, has the study of the origins of paranormal disbelief been so neglected?” (9). An intertwined complex of historical, psychological and philosophical factors seems involved; here surely is material for several PhD theses and larger works. Yet in his study of disbelief, Irwin made use of “one of the best documented psychological correlates of paranormal belief”, which distinguishes an “intuitive-experiential mode” from a “rational-analytic mode” of thinking style. But to separate “rational-analytic” from “experiential” modes is to recycle the Enlightenment pathology which Kant displayed so prominently. It serves the notion that disbelief in psi is coupled with “reason”, and belief is coupled with the irrational.

We need to understand precisely how this pernicious notion came about. We need to understand how and why cognitive pathologies insert themselves in a thinking style. The “study of the origins of paranormal disbelief” is unfinished business that cannot remain so neglected.

Professor John Poynton is President of the Society for Psychical Research.

References

1. Sheldrake, R., Shermer, M. & Barham, J. *Arguing Science: a Dialogue on the Future of Science and Spirit*. Rhinebeck, New York: Monkfish Book Publishing Company, 2016.
2. Sidgwick, H. Presidential Address. *Proceedings of the Society for Psychical Research*, 1 July 1882, pp. 7-12.
3. Sidgwick, Henry. Presidential Address. *Proceedings of the Society for Psychical Research*, 1 December 1882, pp. 65-69.
4. Kelly, E.F., Kelly, E.W., Crabtree, A., Gauld, A., Grosso, M. & Greyson, B. *Irreducible Mind: Toward a Psychology for the 21st Century*. Lanham, Maryland: Rowman & Littlefield, 2007
5. Maslow, A. *The Psychology of Science: A Reconnaissance*. New York: Harper & Row, 1966.
6. Sidgwick, H. *Lectures on the Philosophy of Kant and other Philosophical Lectures and Essays*. London: Macmillan & Co., 1905.
7. Johnson, G. (ed.) *Kant on Swedenborg: Dreams of a Spirit-Seer and Other Writings*. West Chester, Penn.: Swedenborg Foundation, 2002.
8. Smuts, J.C. *Holism and Evolution*. London: MacMillan, 1926.
9. Irwin, H. Thinking style and the making of a paranormal disbelief. *Journal of the Society for Psychical Research*, 79.3 July 2015, pp. 129-139.

This paper is a modified version of my President’s Letter published in the SPR’s *Paranormal Review* 77, 2016.



Science and Religion: A Survey of Spiritual Practices and Beliefs among European Scientists, Engineers and Medical Professionals

Edited by David Lorimer

The “scientific community” is often assumed to be hostile to religion and spirituality, an impression reinforced by celebrity atheists like Richard Dawkins and Brian Cox. But what do members of the scientific community actually believe and do? In order to obtain a quantitative picture, the Scientific and Medical Network (SMN), supported by the Salvia Foundation of Geneva, commissioned Ipsos-MORI to conduct a confidential, independent survey of scientists, engineers, technical and medical professionals in the UK, France and Germany.

Overall, there were more than 3,000 respondents (in each country there were just over 1,000). The survey was conducted in early December, 2016, using Ipsos-MORI's standard online survey techniques. Respondents were members of the Ipsos Interactive Services online panel and were recruited to take part in this survey based on occupation data gathered from previous surveys they have taken part in. The profile of the survey reflects those who chose to take part and is therefore not weighted. The samples contained a roughly equal representation of men and women: 54% men and 46% women overall. They also contained a wide spread of ages. Ages 18-34 constituted 22% of the sample; 35-54, 49%; and 55+, 29%.

The principal findings from those who took part were as follows:

Religious and spiritual beliefs and practices

Atheists were a minority of the professional scientific and medical community in all three countries (25% in the UK; 29% in France; and 24% in Germany). When agnostics were included, less than half the respondents were non-religious (46% in the UK and France; 35% in Germany: Table 1).

The proportion of people who classified themselves as religious or spiritual was highest in the UK, at 45% (Table 1). However, only 13% were practising members of a religion, mainly Christianity. Some people did not see themselves fitting into any religious, spiritual or non-religious categories. The highest proportion of uncategorised people was in Germany, 20% (Table 1).

In the UK about a third (35%) of the respondents said that religion or spirituality were very or fairly important to the way they lived their lives, significantly more in than in France (25%) and Germany (24%) (Table 2).

In summary, contrary to popular perception, there was no predominance of atheists and agnostics among scientists, engineers and medical professionals in these three countries, and religion or spirituality played an important part in their lives of a quarter to a third of the respondents.

Meditation and prayer

Most respondents neither prayed nor meditated, but in all three countries, 18-20% meditated at least once a month, and in the UK, 25% prayed at least once a month, significantly more than in France (17%) and Germany (20%) (Table 3).

Not surprisingly, a far higher proportion of religious/spiritual people prayed than atheists and agnostics. In the UK, 51% of religious/spiritual people prayed at least monthly, whereas only 1% of non-religious people did so. Likewise, in France and Germany, a far higher proportion of religious/spiritual people prayed than atheists and agnostics (Table 4).

Among the non-religious, meditation was much more popular than prayer. In the UK, 15% of non-religious people meditated at least once a month, compared with 22% of religious/spiritual people (Table 4). In France and Germany, a smaller proportion of atheists and agnostics meditated than in the UK, and a slightly higher proportion of religious/spiritual people did so.

In summary, more people prayed than meditated. But in all three countries a significant proportion of non-religious people meditated, although they did not pray.

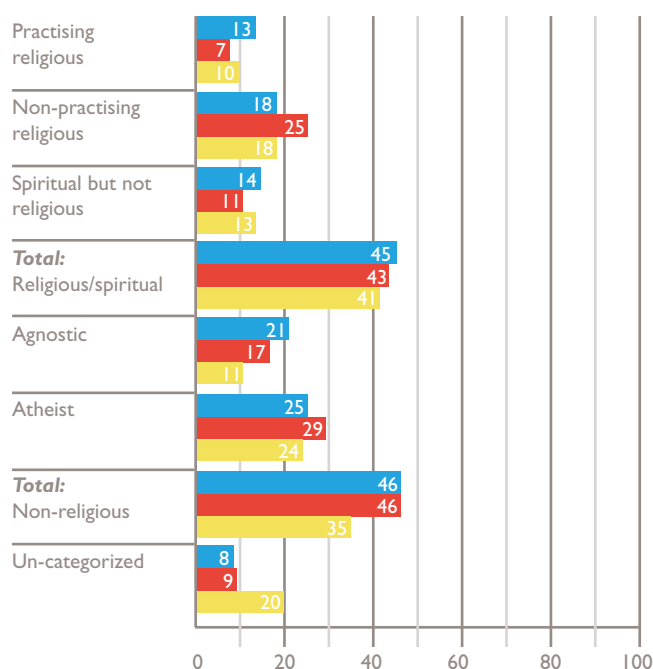


Table 1. Practising religious, non-practising religious, spiritual-but-not-religious, agnostics, atheists and uncategorized people among scientists, engineers and medical professionals in the UK, France and Germany (percentages), together with the totals for the religious and spiritual and for the non-religious.

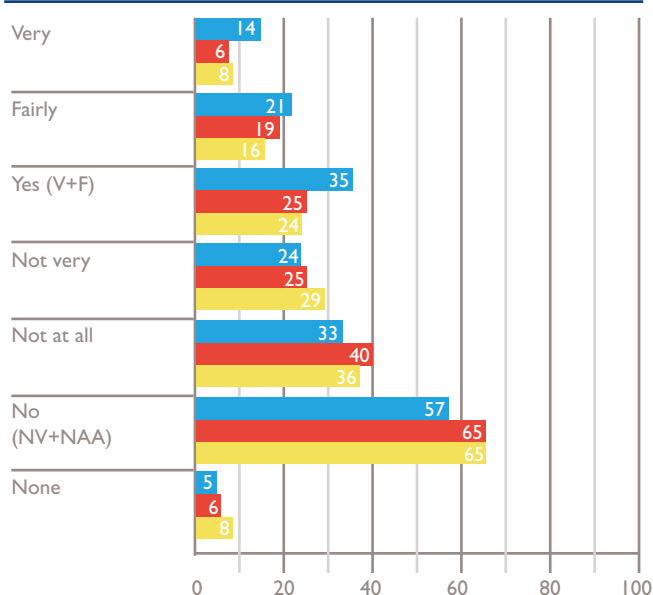


Table 2. Importance of religion or spirituality in people's lives (percentages).

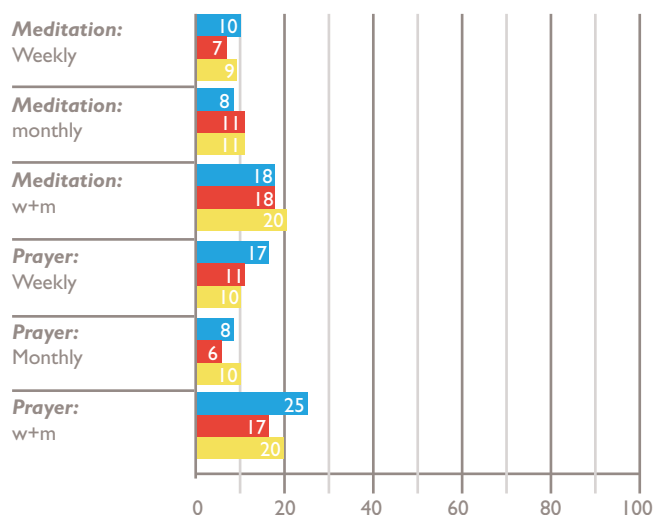


Table 3. Meditation and prayer at least once a week or once a month (percentages), together with weekly and monthly totals (w+m)

KEY



The relationship between science and religion

Nearly half the respondents felt that science and religion could not be compared, saying that they are independent areas of enquiry: in the UK 44%, France 52% and Germany 47%. In the UK and Germany, 21% believed that science and religion were complementary, with each helping reinforce the other, compared with 16% in France. A minority though that science and religion were mutually exclusive and contradictory: 25% in the UK, and 21% in France and Germany (Table 5).

This means that about two thirds of the respondents in all three countries thought that science and religion were complementary or independent. Atheists were more prone to see them in conflict than others, but even among atheists, in the UK only 50% took the conflict view, in France 40% and in Germany 45%.

The relationship between science and spirituality

In France significantly more people believed that science and spirituality are complementary, compared with science and religion. There was a similar trend in the UK and Germany, but the effect was smaller. In all countries, people saw less conflict between science and spirituality than between science and religion (Table 5), and atheists in particular showed a big difference in their response to this question. In the UK only 28% of atheists saw a conflict between science and spirituality, compared with 50% seeing a conflict between science and religion. Likewise, only 21% of French atheists and only 32% of German atheists saw a conflict between science and spirituality, whereas a significantly higher proportion saw a conflict with science (see above).

Effects of gender

In all three countries, more women than men were religious/spiritual, and more men than women were atheists (Tables 6A and B). When the results from all three countries were combined, 47% of women and 39% of men were spiritual/religious, whereas 45% of men and 38% of women were non-religious (Table 7).

Effects of age

In all three countries there were similar age-related trends. The youngest age group (18-34) had the highest proportion of non-religious (50%) and the lowest proportion of religious/spiritual people (35%). In the middle group (35-54), 42% were religious/spiritual and 41% non-religious, and in the oldest age group (55+) 49% were religious/spiritual and 38% non-religious (Table 8). In other words, younger people were more atheistic and agnostic, and less religious or spiritual than older people.

Effects of educational level

In all three countries, there was a similar trend in relation to educational level. Those with the equivalent of a bachelor's degree or below (for example who were working as technicians) were significantly less spiritual/religious than those with the equivalent of a master's degree or above, including PhDs and MDs. Overall, 39% of those with lower qualifications were religious/spiritual compared with 45% of those with higher qualifications. The percentage of atheists in both groups was the same (27%; Table 9).

In summary, atheism did not increase with educational level, and the more educated were more religious/spiritual than the less educated.

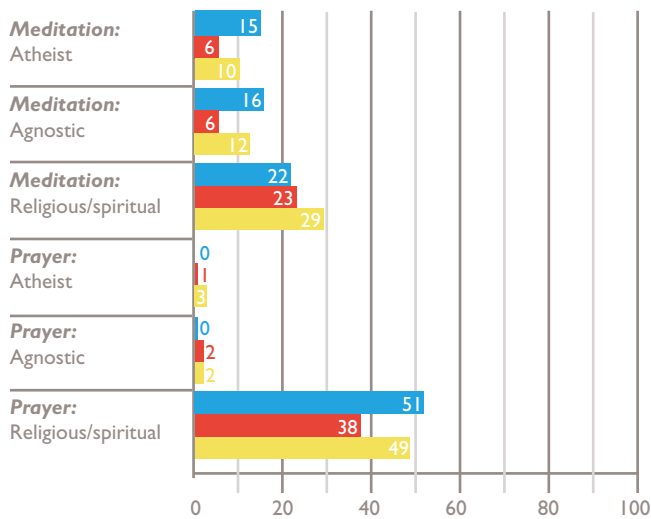


Table 4. Percentage of atheists (At), agnostics (Ag) and religious/spiritual (R-S) people who meditated or prayed at least monthly (percentage within each group)

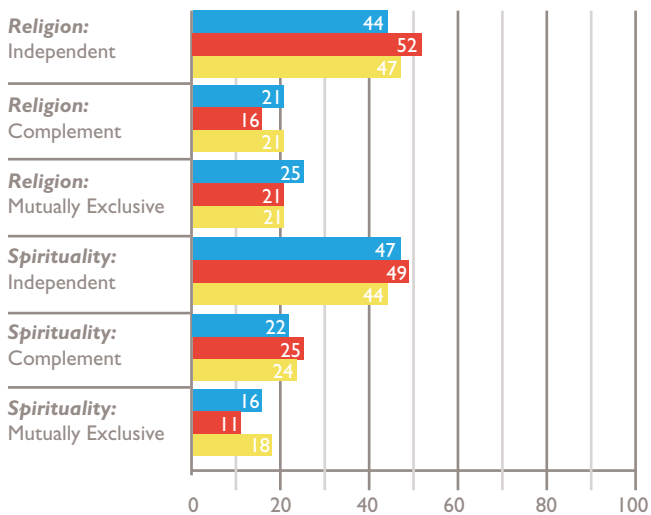


Table 5. Percentage of people who thought that science and religion are independent, complement each other or are mutually exclusive and contradictory, together with the results of asking similar questions referring to spirituality as distinct from religion.

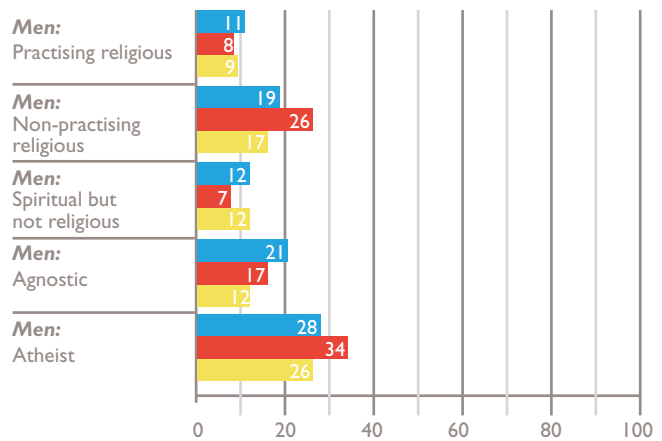
Differences between countries

Overall the results from all three countries were remarkably similar. The most striking differences were a significantly higher percentage of practising religious people in the UK, especially compared with France (13% as opposed to 7%; Table 1). Consistent with this finding, the UK also had the highest proportion of people who said that religion or spirituality were important for the way they lived their lives (Table 2), and the highest proportion of atheists and agnostics who meditated (Table 3).

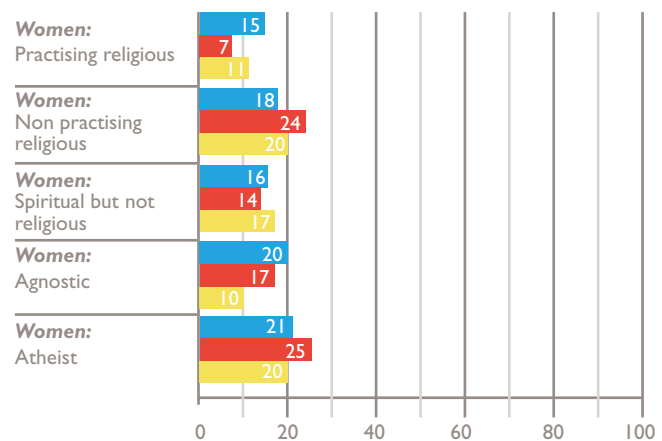
France had the highest proportion of atheists (29%), perhaps reflecting its strong secular tradition. Germany differed from the UK and France in the high proportion of people (20%) who did not put themselves into any category (Table 1), which could be a consequence of the fact that in Germany people who classify themselves as Christian are expected to pay a church tax.

Conclusions

This survey shows that “the scientific community” is not essentially atheistic or anti-religious. In all three countries, atheists were a minority, and the ‘non-religious’ and ‘religious/spiritual’ groups were of a similar size. In the UK a third of the respondents said that religion or spirituality were important in their own lives, and in France and Germany a quarter said so. Most people, including most atheists, saw no conflict between science and spirituality.



Tables 6A and 6B. Percentages of men (A) and women (B) who described themselves as practicing religious, non-practicing religious, spiritual but not religious, agnostic and atheist in all three countries.



KEY

Male
Female

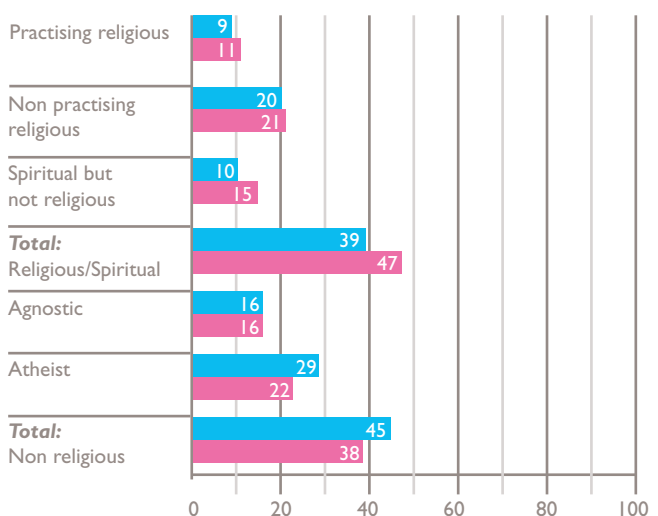


Table 7. Combined results from all three countries showing percentages of men and women who described themselves as practicing religious, non-practicing religious, spiritual but not religious, agnostic and atheist, together with combined results for religious/spiritual and non-religious.

KEY

- Age 18-34
- Age 35-54
- Age 55+

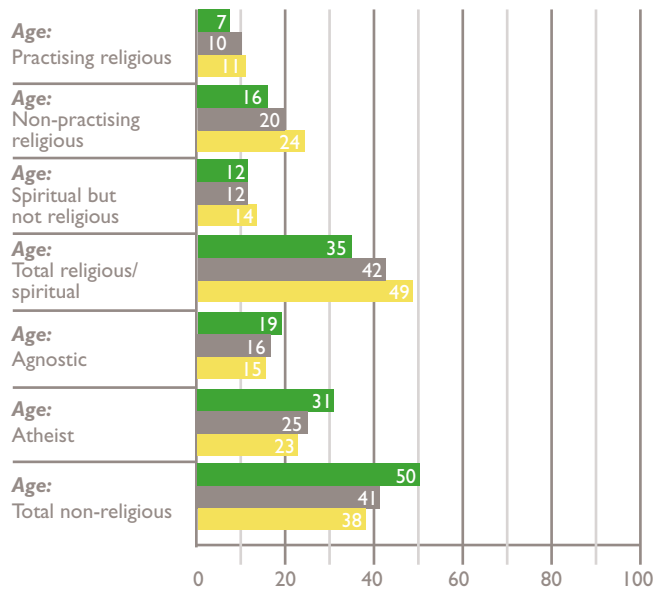


Table 8. Combined results from all three countries showing percentages in different age groups (18-34, 35-54 and 55+) who described themselves as practicing religious, non-practising religious, spiritual but not religious, agnostic and atheist, together with combined results for religious/spiritual and non-religious.

KEY

- B- 18-34
- M+ 35-54

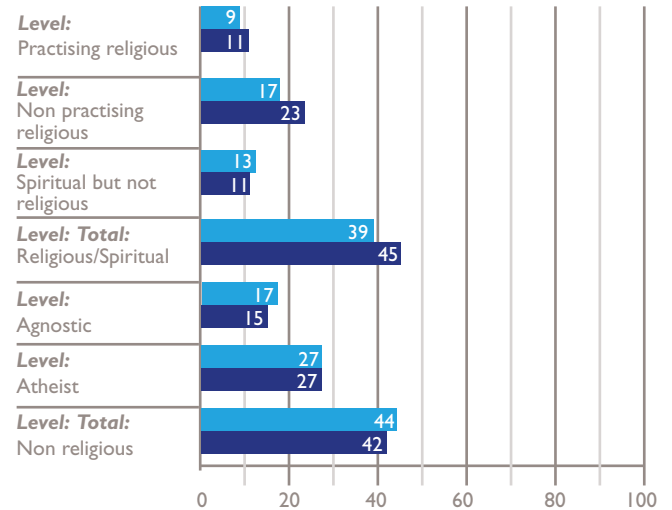
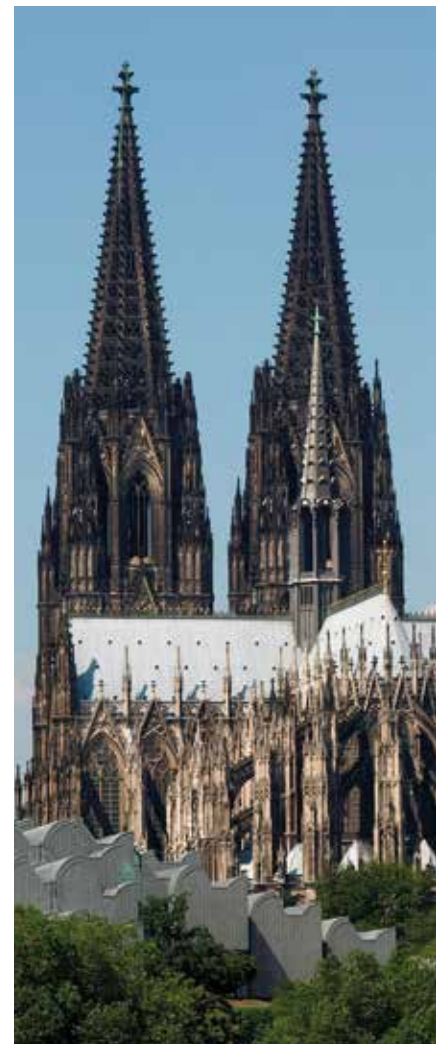


Table 9. Combined results from all three countries showing percentages at different educational levels (Bachelors and below, B-; Masters and above, M+) who described themselves as practicing religious, non-practising religious, spiritual but not religious, agnostic and atheist, together with combined results for religious/spiritual and non-religious.





The Cosmic Consciousness Connection

Eve Hicks and Jan Arriens



Overall Synopsis. Thanks to Di Clift, the catalyst and heroic organiser of this amazing annual event, the SMN have been going to Frenchman's Cove near Port Antonio, Jamaica, for a study conference every year since 1997 (apart from a break in 2002-2007). The focus of this year's excuse for a trip to this magical corner of Jamaica was the Cosmic Consciousness Connection. Professor Bernard Carr was the main speaker, although being the only participant with a physics background, he made it clear from the start that he would welcome questions throughout – either to clarify or expand on material covered. The objective was to shed more light on the link between matter, mind and spirit.

Lectures were broadly divided into three parts: (i) foundations of relevant physics theory; (ii) the problem of consciousness and how to get mind into physics; and (iii) spiritual aspects with a particular focus on paranormal and mystical experiences.

The discussion of physics centred on the description and explanation of matter, focussing in particular on our understanding of ever larger and smaller scales. The Uroborus, used first in ancient Egyptian iconography, was used to symbolise the micro and macro forms of matter and the various connections between them. It is clear that what we call the Universe is continuously growing. Plato's

geocentric view, with the Earth at the centre of the universe, prevailed until the 15th century, when Copernicus discovered that the Earth moves around the Sun. Subsequently, Brahe and Kepler discovered the laws of planetary motion, which Newton explained in the 17th century with his law of universal gravitation. Newton's world was 3-dimensional, with space and time being absolute. However, Einstein's work on special relativity in the early part of the 20th century made it clear that space and time are not absolute but different aspects of 4-dimensional spacetime. Furthermore, general relativity a decade later showed that spacetime is warped in the presence of matter, thereby explaining the origin of gravity.



Although the size of a human being is the geometric mean of the smallest and largest scale of the Cosmic Uroborus, so that we are central in terms of scale, we seem to have become increasingly insignificant with advancing knowledge. The heavens have been stripped of their divinity and our common-sense notions of reality have been overthrown. In particular, atomic theory implies that objects are not as solid as previously believed and quantum theory implies that a microscopic system is probabilistic (i.e. described by a wave-function) until it is observed. This presents many interesting challenges for understanding the nature of reality. In particular, quantum theory shows that one cannot measure both position and velocity at the same time and that reality is fuzzy. Frustratingly, although relativity and quantum are known to be completely accurate in their respective domains, they are incompatible and resolving this problem is crucial to the search for a final theory of physics.

Attention then turned to the unification of the forces at work in nature and how this implies that additional (wrapped up) spatial dimensions may be required. In one model, the physical world is viewed as a 4-dimensional “brane” in a 5-dimensional “bulk”. This unification means that it is possible to view all of nature’s forces as manifestations of a single all-encompassing force. For example, electricity and magnetism are unified as part of electromagnetism. This is then unified with the weak force (associated with radioactive decay) as part of the electroweak interaction. At much higher energies this is unified with the strong force (binding atomic nuclei together) as part of a Grand Unified Theory (GUT). The unification with gravity at still higher energies may be achieved with M-theory.

Having described the latest state of physics, Bernard turned to the problem of how to introduce mind into physics. This involved input from other disciplines, including philosophy, psychology and neuroscience. Newtonian physics is mechanistic, in that it reduces the Universe to a machine, and the Cosmic Uroborus – as it stands - makes no reference to mind. The first hint that this may be inadequate comes from the Anthropic Principle. Although humans are no longer central to the Universe, this principle says that some features of the world are explained by the requirement that life and mind should arise. In particular, the Strong Anthropic Principle says that many fine tunings are required between the coupling constants (describing the strengths of the four forces) and various cosmological parameters. Bernard gave some examples of this – for example, how the production of carbon in stars relies on a finely tuned resonance between key elements. He stressed that these tunings are unexplained by mainstream physics. However, they are not specific to humans; they are just required if the Big Bang is to lead to increasing order of complexity, culminating in mind. This is reminiscent of the Evolution versus Intelligent Design debate, except that the existence of a Multiverse gives the Anthropic Principle a more respectable physical basis.

Bernard then reviewed different views of consciousness. Some scientists believe that this is just an excrement of the brain, probably irrelevant to physics and possibly just an illusion.



Others believe that consciousness must be a fundamental part of physics and perhaps even a new state of matter. A more radical view is that the brain is a filter rather than a producer of consciousness, in which case neuroscience will never be able to account for all aspects of experience. Indeed, there is a growing volume of evidence – described in Larry Dossey’s *One Mind* – that consciousness is a non-local unitary phenomenon. This gave an opportunity for participants to share some personal experiences and provide insights from their own professional fields. The different types of mental experience – subdivided into normal, paranormal and mystical – were represented in a graph of frequency (common to rare along the y-axis) versus impact (mundane to profound along the x-axis). So normal experiences (e.g. sensations and memories) were at the bottom left, paranormal ones (e.g. telepathy and clairvoyance) in the middle, and mystical ones (e.g. creative insights, religious epiphany and oceanic feelings) at the top right.

The next lecture focused on paranormal phenomena (psi) and the attempts to explain these theoretically. There are different kinds of theories – transpersonal, psychological, neurological, biological, chemical and physical – but the last is probably the most fundamental since physics underlies all of the sciences from a reductionist perspective. Reasons for connecting physics with psi were discussed and it was noted that both psychical research and physics would benefit from this. Indeed, physics may already be sufficiently exotic to accommodate psi.

Three types of physical theory were discussed: transmission models (where psi is due to some form of signal); quantum models (where non-local quantum entanglement is invoked); and higher dimensional models (going beyond 4-dimensional spacetime). The first seems implausible (because psi does not weaken with distance) and the second seems unsatisfactory because – while quantum theory is undoubtedly relevant to psi – nobody understands this anyway, so it does not give a complete explanation. He therefore turned to the third possibility, emphasising that one needs some form of communal non-physical space and extra dimensions of time (corresponding to different specious presents) to accommodate the full range of mental experiences.

Bernard closed by presenting his own unified model of matter, mind and spirit, stressing that there is a need for some revision of what is meant by these terms. His model invokes extra dimensions of space and time as part of what he calls a “Universal Structure”. Although there are many historical precedents for this approach (notably, Abbott’s “Flatland” and Zollner’s “Transcendental Physics” in the 19th century), it has become more popular in recent years because particle physicists now also invoke extra dimensions, so he relates these two ideas. Regardless of whether this particular paradigm is correct, one needs a form of science that goes beyond the one-level materialist paradigm. This supports the view that one needs some type of Post-Materialist Science

Eve Hicks

January 2017



Jan Arriens' Thoughts

In the first place, Bernard's presentations were a tour de force. His observations covered not just contemporary physics but also philosophy, psychology and religion, with music and humour thrown in, to provide a marvellous overview. Taking us as far as he could with regard to standard physics, Bernard then embarked on the conclusions he had reached about how consciousness, parapsychology and spiritual experiences might all be incorporated into a single model. So far, he has not felt able to do so professionally, as so much of his thinking is not just speculative but also highly controversial. Bernard freely admitted that his model could be incorrect, but at the very least it is a brave attempt to find a place for consciousness. His model may also force the scientific community to sit up and take notice – at best acting as a bridge between conventional science and those who are currently derided.

How far has or will Bernard Carr get? I was repeatedly struck by the similarities between his references to One Mind and interconnection, etc., with the Upanishads. "Brahman is the only truth, the world is unreal, and there is ultimately no difference between Brahman and Atman, individual self." Or: "That which cannot be apprehended by the mind, but by which the mind is apprehended – that alone know as Brahman."

I think that what Bernard says about the need to bring in mind and extra dimensions of time and space makes every sense when it comes to accommodating paranormal and mystical experience, and indeed completing a Grand Unifying Theory. The problem I am left with concerns how this is done. Once one posits mind as the missing factor, everything slots into place, but I think the reductionists will ask how this has been achieved. We are unable to define consciousness satisfactorily, let alone (I presume) put it into a mathematical formula other than as a symbol, or a kind of "balancing item". So I feel there was a jump from

needing mind to incorporating it. But then ultimately an element of mystery will remain, if only because we trying to look at consciousness from the inside.

And consciousness is the one thing that we can only look at from the inside; everything else we observe and analyse from the outside. Perhaps that is why it is so elusive and perhaps ultimately indefinable. But in the same way, we can only look at the universe, or the cosmic consciousness, from within. It may therefore be that we can never apprehend the entire Truth. At Frenchman's Cove we were like seekers climbing a mountain, some by the scientific path, others coming from a philosophical viewpoint and others again guided by personal experience of a mystical nature. All of these are valid in their own way. Bernard took us just about as far up the scientific path as possible. When I found the atmosphere getting rather rarefied, I took comfort from the fact that the authors of the Vedic writings of over two thousand years ago had come to essentially the same conclusions. These they had arrived at intuitively, with a feeling of rightness that is, I imagine, identical to that felt by the mathematician or physicist when things fall into place, at times seemingly in the absence of any agency of their own. I hope Bernard will feel emboldened to take his bold analysis into the public domain.

Eve Hicks: *After a career in professional and academic accountancy and finance, Eve Hicks now works as an advocate for children on the child abuse register. She has been an enthusiastic follower and member of the SMN for about ten years*

Jan Arriens: *Jan Arriens is a semi-retired translator. In 1988 he founded the charity LifeLines, whose members correspond with prisoners on death row in the US. He has had a long-standing interest in mystical experience since his student days in Melbourne, where he was greatly influenced by Raynor Johnson.*

<https://explore.scimednet.org/index.php/frenchmans-cove-2017-the-cosmic-consciousness-connection/>





The World Congress of Faiths and Sarum College Promoting Spiritual Life: an interfaith perspective

“All We Need Is Love!”

Larry Culliford

Being at this day symposium felt something like déjà vu or time travel, issues raised and discussed being similar to those confronting the ‘Spirituality and Psychiatry’ special interest group (SIG) of the Royal College of Psychiatrists after its inception in the late 1990s, beginning with the question, ‘What is spirituality?’ In circumstances where colleagues, patients and their families came from many different world religions and none, the Executive Committee, led by Andrew Powell, sought to develop a language of spirituality acceptable to all. Rather than worry about Humpty Dumpty’s highly egocentric perspective, the idea of poet Aline Kilmer seems more useful: “Many excellent words are ruined by too definite knowledge of their meaning”. The SIG Committee’s response can be found online and in a popular free leaflet, ‘Spirituality and Mental Health’¹ that was published by the RCP in 2002 and has since been updated regularly.

Opening the day, **James Woodward** referred to spirituality as ‘an unreliable concept’; but it may be better considered an aspect of (right brain) experience rather than the product of (left brain) cognitive function. Spiritual experience, far from unreliable, affords trustworthy guidance, and is often transformative. ‘Something happens’ is a good way to put it. Whenever it does, the deeply personal aspect of the individual is communicating with a universal realm or reality, improving one’s awareness of a seamless and sacred connection to the divine, to nature, and to everyone else – living, deceased or to come.

Two sets of ideas help with clarity of thinking around the topic of spirituality. The first concerns five seamlessly inter-linked dimensions of human experience: *physical* (matter and energy), *biological* (life), *psychological* (thought, emotions, sensations, impulses to speech and action), *social* (interpersonal relations, group dynamics) and *spiritual* (an originating principle, creating, linking, shaping the other four: the miracles of existence, life, consciousness and love). Religions have important social as well as spiritual aspects, while personal spirituality is more concerned with the psychological dimension.

The second set of ideas involves seeing ‘life as a journey, where good and bad experiences can help you to learn, develop and mature’ as, for example, in ‘The Meaning of Life Diagram’,² where James Fowler’s 1981 ‘Six Stages of Faith’ have been comprehensively developed and renamed as: *Egocentric, Conditioning, Conformist, Individual, Integration and Universal*. There are different attitudes and priorities at each stage, which explains more about why disagreements arise (both between and within different faith groups) than do theological or cultural distinctions.

A preoccupation with consensus and uniformity, for example, derives from dualist stage three *conformist*, ‘Either/Or’, ‘Right/Wrong’, ‘Us/Them’ type thinking. Preference for a more personal level of involvement is consistent with the stage four *individual* approach, requiring people to take responsibility, thinking and acting for themselves. This leads on to the quieter, homecoming waters of stages five and six. Here, kinship with others is no longer a decision, but more like an inner imperative, based upon a recognisably shared reality and, consequently, an innate

disposition for compassion. This is where holistic, unitary, inclusive, ‘Both/And’ thinking and experience hold sway, the basis of true wisdom: thought, word and action (also silence and inaction) harnessed for the benefit of all, without discrimination.

The idea of immaturity, while uncomfortable, does speak of human potential for growth and ripening. The most fruitful conditions for spiritual development involve feeling secure, worthy and, especially, loved. There are many pathways to maturity. The Royal College leaflet suggests that, ‘a three-part daily routine can be helpful: i) a regular quiet time (for prayer, reflection or meditation); ii) study of religious/spiritual material; iii) making supportive friendships with others with similar spiritual/religious aims and aspirations’. Seeking out a sympathetic and mature guide, guru or mentor may also be helpful (but caution: beware of false prophets, spiritual materialism, etc.).

Inter-faith dialogue, communication and fraternisation can also be of remarkable benefit. Take, for example, the meetings over three days in 1968 of the Cistercian monk and spiritual writer Thomas Merton with the Dalai Lama of Tibet. Merton later wrote, “I felt we had become very good friends... There is a real spiritual bond between us”. His Holiness reciprocated, speaking later of the “profound spirituality and love” in Merton’s eyes.

Spirituality knows no boundaries, and love is one of its key concepts, breaking down barriers, building bridges of faith, understanding and acceptance. Whereas terms like ‘Christian spirituality’, ‘Muslim spirituality’, even ‘Humanist spirituality’, do have meaning, they hark back to stage three, conformist (left brain) thinking, very helpful, but only as a platform for integration into something greater, something universal, something recognizable through intuition, even if beyond the reach of mere words.

This is where – individually and collectively – humanity is headed, according to De Chardin, through personal and social evolution towards the Omega Point. The World Congress of Faiths and Sarum College are undoubtedly playing their part. Faith, courage, hope, patience and perseverance are required; and the continued promotion of spiritual over material values in all corners of society. Shared discussion and dialogue, can be important, but so too are silence, stillness, contemplation and prayer. Being and doing; Mary and Martha: both are of value. Clock time (*chronos*) is less significant in the search for wisdom than God’s time (*kairos*). As the Book of Proverbs³ has it: “Lay aside immaturity, and live, and walk in the way of insight”. Alternatively, as the Beatles once advised: “All we need is love”.

Larry Culliford is a retired psychiatrist and author of ‘Love, Healing & Happiness’ (O Books, 2007), ‘The Psychology of Spirituality: an introduction’ (JKP 2011) and ‘Much Ado about Something: a vision of Christian maturity’ (SPCK, 2015). See: www.LDC52.co.uk. Email: larry@LDC52.co.uk



Photograph of Thomas Merton. Used with permission of the Merton Legacy Trust and the Thomas Merton Center at Bellarmine University.

¹ www.rcpsych.ac.uk/healthadvice/treatmentswellbeing/spirituality.aspx

² www.maneyonline.com/doi/pdfplus/10.1179/2044024314Z.00000000019

³ Proverbs 9:6.



Report of AHT/ SMN joint one-day conference

18th June 2016 at the Essex Unitarian Church in Kensington, London W8.

John Franklin

The theme of this year's summer conference was *Health and Spirituality*, at which we welcomed as speakers, Revd Dr Jeff Leonardi and Dr Peter Fenwick. Chaired by Rowena Rudkin, Chair of the AHT London Group and Dr Bernard Carr, the day included the two principal talks in the morning, and an open Panel discussion in the afternoon, Dr Leonardi and Dr Fenwick being joined for this event by Dr Natalie Tobert and Dr Dagmar Corry. Attendance at the conference was a little on the low side, with just 23 delegates present, but the event was most successful, with the talks generating much interest and discussion



Revd. Dr Jeff Leonardi, Honorary Research Fellow, University of Wales Trinity St David, Lampeter, PhD on Person Centred approach to spirituality, started with a few words about his work at the University of Wales Trinity Saint David, and the current seminar series being run there on 'Spirituality and Health'. In his talk, *Counselling, Health and Spirituality*, he said his personal and professional journey had the underlying theme of integrating Christian faith and spirituality with the 'person-centred' approach to counselling and other human relationships. He gave a working definition of the term 'spirituality' as that which gives meaning, value and purpose to a person's life – going on to develop a broader, twelve-point, definition of spirituality. He talked of an interesting overlap in research into the outcomes for individuals of significant spiritual experiences and effective counselling and psychotherapy – outcome of successful therapy, being where a person moves away from *fixity* of feelings, conceptions and behaviour towards openness, and honesty with regard to self, God and others. Recognising that many people are moving away from the Church, he stressed, though, the importance of belonging and of ritual to many people.

Jeff discussed genuineness or authenticity in therapeutic relationships, especially within a religious context, saying it is vital for well-being that one has solid friendships with people with whom one can relax and be oneself, without fear of judgement and criticism. He said that whilst many clergy do not have such relationships, a new culture can be found in many dioceses now, where mutual (and specialist) support is encouraged. He said his own dedication is to the person-centred approach to counselling instigated by Carl Rogers, where importance is given to authenticity or congruence. The therapeutic progress has the client moving away from incongruence towards congruence i.e. towards accurate understanding of their inner state – and to 'unconditional positive regard', where the therapist offers to the client an attitude of complete acceptance and warm valuing. He stressed the profoundly spiritual dimension to this quality of acceptance, and that health, wholeness and spirituality are intimately related within the psychological paradigm of the person-centred approach. He ended by saying that, from a psycho-therapeutic perspective, spirituality is so clearly to be viewed as constituting a primary dimension of wholeness, health and well-being.



Dr Peter Fenwick took as the subject of his talk, *The significance of meditation practices in our understanding of spirituality. A new thrust towards health*. In a well-illustrated talk, he said that meditation has moved from being the domain of the odd-ball scientific researcher

to a widely-used instrument for promoting health-care. He said his interest in meditation dated back to 1969, and he identified two strands of effect – increase in physical and mental well-being, and increase in spiritual experience. This led to an interest in consciousness and the question, what is consciousness? Defining consciousness, he said there were two states – duality and non-duality: duality as experienced in ordinary life, the subject-object world, but also experience, or consciousness, of all as unity, non-duality – a physics of the interconnected universe where you live in the moment only, which Peter defined as 'Unitary consciousness', which may be experienced in a meditation state, or as an individual one-off spiritual or religious experience.

He defined spirituality as spiritual seeking, a search for and experience of the divine (separate from religion) and meditation as a technique for cleaning the mind, enhancing the physical body and its environment – a process of 'awakening', and a passage from 'Consciousness' to 'Unitary consciousness'. He defined several types of meditation: loving-kindness meditation, mindfulness meditation, visualisation meditation, a withdrawal of the senses – and described the benefits of meditation as helping to prolong life; reducing anxiety, hypertension and drug abuse in a clinical situation; and helping deepen spiritual experience.

Peter ended by asking the question: how many of us want to awaken? – how many of us want to deepen our spiritual experiences?

Open Panel discussion:

Discussion centred on various topics, including meditation and spiritual awakening, the nature of non-duality and removal of the ego – and the purpose of meditation, with a question of when it should be introduced to schools and prisons.

The Church's view of psychical matters was raised, that this seemed generally negative, with little information to help the Church – no manual or compendium. This led to distinction between religion and spirituality; a rejection of religion and dogma, but a search for meaning, with many people on a spiritual journey; and an acknowledgement that religion allowed us to live on a communal level and not just as individuals in isolation.

The speakers, panel and the audience were warmly thanked for their participation, and Bernard was thanked for chairing the panel discussion – and the meeting was then brought to a close with thanks being given to the Essex Unitarian Church for its hospitality and all who had participated in making the day the success that it was.

[A transcript of the talk by Dr Jeff Leonardi, and a note and PDF of Dr Peter Fenwick's presentation are available, and can be sent by e-mail attachment on request.

Contact: John Franklin
e-mail: johnfranklin35@hotmail.com]

John Franklin is a retired architect/town planner. Former Secretary of the *Alister Hardy Society for the Study of Spiritual Experience* (now Alister Hardy Trust), he is author of *Exploration into Spirit*, a history of the Alister Hardy Religious Experience Research Centre (AHS Lampeter, 2006).

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.

NETWORK NEWS

SMN Thinking Challenge Papers by Leading Scientists or Medics

Paul Filmore writes: As an attempt to encourage professional scientists and medics out of their expert domain (due to the habitual limitations imposed by relating with their competitor peers), this series of papers challenges professionals to share briefly cross disciplinary insights and speculations. These two page 'think pieces' dare individuals to speculate in the widest way by 'thinking outside the box' to challenge present day theories and beliefs.

One process to aid speculation is to map an area of one's professional domain onto a dissimilar domain, and see if constructive insights, interconnections, synthesis etc., takes place. This is certainly not an anti-science process, as one is speculating within years of experience, knowledge and wisdom. It may though lead to a new science of the human being and the universe we inhabit (or think we do!).

Papers of around two pages (including references) are invited for peer review. The peer review is in place, to reflect on/ help improve, the clarity of the reasoned argument, to communicate their reader 'challenge' in the paper. Published papers will give the author a six-month electronic membership access to the SMN (journal and archives). Please email papers to chairman@scimednet.org

Appointment of Directors, 2017 – Nicholas Pilbrow

At an Extraordinary Meeting of the Company held on April 7th 2017, it was resolved to change the Articles of Association of the Company to increase the number of directors that the Company may have from eight to ten and to increase the number of directors that could be co-opted by the Board from two to four. **Mr Martin Redfern** had previously given notice of his intention to resign after the Annual General Meeting of the Company in July 2016 as reported last year. He subsequently agreed to stay on as vice chairman of the company until November 2016 and has now resigned. He will be missed by all and his long service to the Company is greatly appreciated. During the year, **Mr David Jaques** was co-opted as a director and Treasurer but he sadly has since had to resign due to the pressure of other commitments. 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**, **Mr Richard Irwin** and **Mr Paul Kieniewicz**. All those retiring are eligible for re-election or co-option and all have indicated their wish to continue. The remaining Directors are (2015), **Dr Edi Bilimoria** (2011), **Mr Tuvi Orbach** (2014) **Mr David King** (2016) and **Dr Paul Filmore** (2016 – Chairman).

There are now up to eight possible vacancies for Directors to be elected at the Annual General Meeting and three current applications. Of particular concern to the company is the loss of the Treasurer, David Jaques, particularly following the untimely death of his predecessor Simon Raggett the previous year, and great importance is being given to finding a replacement for him. 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, 2017 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

Blaker Fund to Support Research – Invitation to Apply

The Trustees of the GB Blaker Charitable Trust have requested that the grant, and the interest arising from it, shall be used to fund educational programs, in line with the charitable objects of the SMN Trust and SMN, particularly for young people aged approximately 15-30. Note especially that the intention is that the funds shall be used purely to support such educational programs in science or medicine. All those who wish to be considered for a grant in the range of £500 to £5000 are requested to apply 9th June 2017 to the Education Domain Holder, Edi Bilimoria, email: edibil@btinternet.com for guidance on application.



MEMBERS' NEWS The Penrose Institute – Sir Roger Penrose, OM, FRS, honorary member

The Penrose Institute is a non-profit research organisation in Oxford and San Diego whose mission is to understand the human mind, the cosmos and the laws of physics that govern them and to spread the wonder of science and mathematics, inspired by the scientific philosophy and writings of Roger Penrose. You may contribute to the organisation online, through its website, or by email or phone or contact us for further details on how you can help us create new physics.

Web: www.penroseinstitute.com

Facebook: <https://www.facebook.com/penroseinstitute/>

Web: <https://www.maths.ox.ac.uk/people/roger.penrose>

Email: press@penroseinstitute.com

NOURISHING THE PILGRIM SOUL



**A Weekend Retreat with
RAVI RAVINDRA
at Hawkwood College, Stroud
1 – 3 September 2017**

What is a *pilgrim soul*? What are the attitudes and characteristics of a pilgrim on a spiritual journey? Are they different from those of a religious believer? Can we be exclusively committed to one religion and belong to God? In this retreat we will discuss in detail the meaning of a *pilgrim soul*. What sorts of practices nourish a pilgrim and what stands in the way? Each pilgrim must begin from where they are, influenced by a particular culture and religious tradition. However, a state of being nourished by Truth or God is in essence transcultural and transreligious. On the Friday evening Ravi will be giving an open public talk entitled *Have You a Pilgrim Soul?* and this will form part of the retreat weekend.

Bookings: www.hawkwoodcollege.co.uk
info@hawkwoodcollege.co.uk, 01453 759034



**“The Divided Brain”
Documentary with Iain
McGilchrist**

A crowdfunding campaign has launched on Kickstarter to help complete “The Divided Brain”, the first documentary based on “The Master and his Emissary” by Dr Iain McGilchrist. The film will bring to a wider audience Iain’s ideas about our brain hemispheres and how understanding them can help us deal with global problems and our day-to-day lives. The film was shot in several countries and features Iain McGilchrist, actor-comedian John Cleese, Dr. Jill Bolte Taylor, Dr. Michael Gazzaniga, Dr. Leroy Little Bear, the former Archbishop of Canterbury Rowan Williams, and other experts and personalities. The goal is to raise \$60,000.00 before the deadline of Wednesday, May 31st. This is an ‘all or nothing’ campaign, so backers’ credit cards are not charged until the deadline, and only if the funding goal is met. To see the film’s trailer, visit “The Divided Brain” Kickstarter page at <http://supportdividedbrain.com>

LOCAL GROUPS

LONDON GROUP



CLAUDIA NIELSEN – 0207 431 1177,
claudia@cnielsen.eu

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 2017

We started the year on a high, with a full house and 35 people on the waiting list to hear **RUPERT SHELDRAKE** pose the question and discuss *Is the Sun Conscious?* Rupert started by reminding us that many traditions and mythologies consider the sun as conscious or even sacred, and salutations to the sun or sun-god are not unusual. The idea

that the sun is composed of very hot but dead matter, has its roots in the Cartesian split, which determines that all matter is dead and unconscious. This applies also to the Earth and the rest of the universe. On the other hand, pantheism - or panpsychism - considers that mind is primary, and all nature in the universe is permeated by mind. Rupert recalled the ideas of Alfred North Whitehead, who saw matter as process in time and not as objects. The relationship between matter and consciousness or body and mind, so central to the understanding of reality, is explained as body being the realm of the past and mind the realm of the future (possibilities). They intersect in the present. Mind is therefore the realm of possibilities not facts, and it permeates the universe.

Whereas the prevailing metaphor is mechanical, Whitehead used the idea of organism to explain the universe. Organisms have nested hierarchies with each level including lower, and being included in higher levels – e.g. atoms in molecules, molecules in cells, cells in tissues etc. all the way to planets in solar systems, in galaxies etc.

The theory of the universe as organism can incorporate Rupert’s own theory of morphic resonance and also Whitehead’s principle of prehension leading logically to the idea of a conscious sun. Rupert told us that in 1997 he and some other scientist colleagues got together to discuss this subject and although they came to the conclusion that a conscious sun could not be proven, they also agreed that it could not be disproved. Exploring this idea further, what would a conscious sun be thinking of, what would be its purpose? Consciousness presupposes the potential for action, and the sun is in constant activity, flares, sun spot cycles, mass corona ejection, may not be automatic patterns. If these are conscious actions, what might be their purpose? Could it be to influence in some way its “body”, the solar system? We know that electromagnetism plays an important role in all areas of life, including the thought activity within our own brain. It is also known that the sun has an electro-magnetic field. Might communication within the universe be across this field, through what we understand as thought? Might the sun be the big eye of mythology and be omniscient? These were some of the questions explored this evening by Rupert and by an excited audience.

February



This month we heard **DR. PETER MOORE**, an academic who back in 1972 pioneered the new area of Religious Studies at University of Kent, and later introduced an MA in the Study of Mysticism and Religious Experience at the same university with the late Leon Schlamm. This evening Peter presented a talk he entitled *Science, Religion and the future of the Afterlife*.

He started by stating that our ideas of the afterlife are necessarily anthropocentric, geocentric in character and culturally constructed, aligned with priorities we give to our present life. The question itself however is of serious interest because if we were to be able to establish that survival after death is a reality, this would throw light on many aspects of life including facts at present dismissed. It would explain the long held belief in ghosts and also give insight into the benefits or otherwise of rituals and customs for the newly deceased person. Therefore, experiences currently labelled as paranormal, mystical, or spiritual need to be taken seriously which does not mean accepted uncritically or at face value, but given due consideration.

One of the difficulties is that the tension which exist between the domains of science and religion, means that the question of parapsychology is regarded with suspicion by both camps, science seeing it as too “mystical” and religion as too “materialistic”. On the question of eschatologies, Peter pointed out that these have historically been commentaries on a whole spectrum of relevant human ideas and experiences. As with so many other ideas within doctrinal systems, they are also subject to revision, and he suggested that this is a good time to revisit those. Reincarnation has taken hold in the collective psyche and is seen to be compatible with empirical data. Recent Christian thinkers have attempted to incorporate this idea in the Christian doctrine but this move has been seen as controversial. Peter concluded his thoughts by talking about the two principles which he thinks are important in the consideration of life after death: the first being the principle of corporeality – the idea that in the afterlife we must be embodied in some sense and the principle of continuity, the idea that whatever the experience in the afterlife, it cannot be completely discontinuous with what came before. These ideas gave rise to an animated discussion which lasted well beyond our normal ending time!



March

MARIANNE RANKIN, Communications Director of the Alister Hardy Society entitled her talk: *Experiences of Angels – Intimation of Ultimate Reality?* She started by telling us that she has had in the past reservations about the existence of angels, and only when she was asked to look into this subject for a conference, did the topic come

alive for her. She found that a MORI poll in 2009 established that 46% of the adults in Britain believe in guardian angels (58% of those being women) and 3 out of 4 of those believe that their Guardian Angel has helped them in their daily life. The concept of angels is deeply embedded, especially in the Abrahamic religions. The word comes from the Greek *angelos*, which means messenger. Angels are messengers from God. Many religions recognise beings that exist between the divine and humans. The Buddhists call them *devas* and the Zoroastrians, *daevas*. In the Abrahamic religions, angels are understood to have been created by God. They are purely spiritual

beings, mainly male, beautiful and have wings. They sometimes take on human form. We heard about the angels mentioned in the Bible, both the Old and New Testaments and Dionysius the Areopagite talks about hierarchies of angels.

In the New Testament Archangel Gabriel brings important messages from God, announcing the birth of John the Baptist to his parents and the birth of Jesus to Mary and in Islam Archangel Gabriel gave Muhammad the revelations of the Qu'ran. But angels do not belong only to the distant past, Archangel Michael was reportedly seen by soldiers during the assault on German trenches in the Battle of Mons in 1914. Marianne showed us a number of paintings of angels by various artists including Leonardo da Vinci and Chagall, for more recent works, we saw Anthony Gormley's Angel of the North, erected in 1998 in Gateshead and is 20 metres tall and has a wingspan to 54 metres. We also heard about reports from the Alister Hardy archives of strangers warning people of danger, who subsequently are found to have disappeared. Those experiences leave the impression of an encounter with an angel. In our discussion we had the opportunity to hear personal stories of members of the audience of unexplained events, which could have been angelic encounter or intervention.



April

In-Formation at the Centre of the Creation: consciousness, causality and coherence, was the title of **DR. JUDE CURRIVAN** presentation this month. Jude is a cosmologist, as well as a mystic.

She has a Masters Degree in Physics from Oxford University specialising in quantum physics and cosmology, and a PhD in Archaeology researching ancient cosmologies. She had mystical experiences from a very young age and worked with the wisdom teachers of many traditions furthering over many years, her interest and research into the nature of reality. Jude started by telling us that the evidence-based and the faith-based worldviews can be reconciled into a whole worldview of a conscious, evolving and unified Cosmos where we, humans, are both creation and co-creators. This is based on 21st century science which describes our Universe as a cosmic hologram where consciousness expresses itself as space and time, energy and matter through informational patterns and relationships at all scales of existence. Time, Jude says, is the universe thinking and space is our universe breathing.

In the first moments of the Big Bang, or Big Breath as she likes to call it, time flowed which also implies an ever increasing level of entropically expressed information. At that moment also, space started to expand and so holographically contain ever more evolutionary information – and emergent self-awareness. Jude says that recent scientific discoveries show that information is more fundamental than energy-matter and space-time. She says that the same digitised information that underpins our technologies is also the basic stuff of our universe. Our universe is in-formed, by which she means formed by information shaping space-time and energy-matter.

That information is not random, and the Big Breath which brought our Universe into being, was not chaotic but highly ordered and fine tuned. The in-formation is physical, as exemplified by excitations and processes of physical reality and is more fundamental than energy-matter. Interestingly, the in-formational patterns embodied in our Universe at all scales of existence are the same when plotted on a graph – whether natural or man-made. Examples shown were the incidence and violence of earthquakes, events in Iraq and the number of casualties, the internet, stock markets, growth of cities, etc. And she showed that the holographic nature of the Universe follows fractal patterns. At the core of her proposal is the idea that what we call Reality is integral information/consciousness which within physical spacetime expresses itself as interconnected holographic fractal patterns of energy/matter on all scales of existence. So more fundamentally, nothing is random, everything has meaning and purpose. Jude's book *The Cosmic Hologram: In-formation at the Centre of Creation* is now out and her website is <http://www.judecurrivan.com>.

KENT GROUP YVONNE LOUIS

The Kent branch has been quietly active over the past two years, despite the lack of reports which may suggest to the contrary! This is due to various contributory factors like a change in venue to the local community arts centre and my own personal circumstances. Still we have managed to continue with our meetings and have been fortunate

to have had such excellent speakers who have covered a number of varied and interesting subjects and all events have been extremely well attended. In addition we have held some informal discussion groups in order to review some of the talks, which has enabled us to explore the issues raised in more depth. We are fortunate in that there is a small core of people who always help with the practical arrangements like catering and transport on the day.

On 5th June 2015 we were honoured that **Professor Brian Lancaster** was able to be with us. Brian (Les) is Emeritus Professor of Transpersonal Psychology at Liverpool John Moores University, UK. As well as several other posts, he is the current President of the International Transpersonal Association and Chair of the Transpersonal Psychology section of the British Psychological Society. His first book *Mind, Brain and Human Potential* won an SMN award.

Professor Lancaster's talk "Kabbalistic Psychology: Conscious, Creation and the Sacred" explored the two faces of Kabbalistic psychology – the first focusing on psychological insights intrinsic to traditional Kabbalistic texts, and the second concerned the role that contemporary psychology and neuroscience may play in interpreting and developing the Kabbalah. Les stressed that a tradition that relies only on its past glories stagnates, but the approach of using Kabbalistic psychology offers a path for integrating the old and new in meeting the spiritual challenges of the 21st century.

Les began by giving an overview of the term "Kabbalah" which he explained applies to a broad stream of mystical and occult traditions generally based in a view of the Hebrew Scriptures as transmitting inner teachings embedded beneath their surface narrative. In a technical sense, the term has been restricted to the specific tradition of mysticism that arose within Judaism in the 12th century. In a broader sense, Kabbalah is profoundly relevant to those seeking an enriched sense of "Western" mysticism and esoteric lore as part of their own quest for spiritual fulfilment.

He went on to elaborate that the term Kabbalistic Psychology is a way of working with traditional Kabbalistic teachings and practices that emphasise their relevance to contemporary research in psychology and neuroscience. With its emphasis on the nature of thought and the way that ideas develop through stages from a concealed seed through to their revealed manifestation, the Kabbalah encompasses a peculiarly rich spiritual psychology. Kabbalistic sources explore what we would call today pre- or unconsciousness processes and provide practices that enable access to regions of the psyche normally closed to conscious thought. Moreover, recent research concerning the relations between consciousness and the brain may be seen to reflect Kabbalistic insights dating back to the 12th and 13th centuries.

The talk provoked much interest and for many of us was helpful in providing enlightenment on a subject where our knowledge was limited. Les happily answered many questions and his explanatory hand out notes were very welcome.

On 11 September 2015 we were delighted to welcome **Phoebe Wyss** for the first of her two talks. This one was "Inside the Cosmic Mind" was based on her recent book *Inside the Cosmic Mind: Archetypal Astrology and the New Cosmology*. Phoebe studied English and Philosophy at Reading University and wrote her MA on William Blake. She worked for twenty years as a lecturer at the University of Hanover, Germany but gave this up in 1985 to become a professional astrologer. Since then she has been giving consultations, courses and workshops and more recently, has been investigating frontier science in her quest to understand how astrology works. She has published two previous books on the astrological archetypes, as well as an astrology board game.

Phoebe's superbly illustrated power point talk explored aspects of the emerging 21st century paradigm of a dynamic self-creating universe. Viewing the cosmos as a living organism with inter-related parts gives new meaning to the Hermetic axiom "As above, so below".

She felt strongly that the cosmology of mainstream physicists must be extended to include the inner levels of reality – the cosmic mind and psyche – arguing that the systems science model of nested hierarchies, when applied to mind, suggests that purpose and meaning in the cosmos could flow top-down from Universal mind and insight would put subject like astrology onto a new footing.

A talk on a perennially fascinating subject, prompted many questions and much discussions.

4th March 2016 we welcomed **Dr. Frances Hawkes** speaking on "When Conservation, Human Health and Agriculture Collide". Frances is a Research Fellow at the Natural Resource Institute, University of Greenwich and her area of research is medical entomology, i.e. insects that spread human and animal diseases, with a focus on understanding mosquito behaviour and ecology in order to "better

know your enemy". From her research findings following field work at various locations world-wide, Frances has been developing new tools to monitor and control mosquitoes and the diseases they spread. She has been a guest contributor to Sky News and has featured in a BBC documentary about her research into a new trap for malarial mosquitoes in Africa.

At that time the crisis with the Zika virus was almost a daily headline and we were fortunate that Frances was available to give a first-hand understanding of the issues involved. For example how the changes we make to our environment in order to achieve intensive production of crops and livestock can have completely unexpected impacts on the health of local human population. The stark reality of the situation was made clear by Frances' power point presentation which showed, for example, the alarming rate of the mass destruction of the Malaysian forests in order to expand and intensify the production of palm oil. (Palm oil is universally used for a wide variety of purposes, from cleansing products, to cosmetics and confectionary). Consequentially the animals have been driven from the forests closer to the urban communities and this has resulted in the emergence of a new species of malaria parasites that have jumped from monkeys to humans via the tiny forest dwelling mosquitoes.

Frances' talk was profoundly relevant and sad in that it brought home the fact that human greed for bigger, better and more consumption is literally at the cost of the planet. This in turn raised challenging questions about how rapid environmental changes for agricultural expansion can jeopardise the habitats and biodiversity and expose people to new disease threats.

Phoebe Wyss' second talk was a major exposition on "Synchronicity, Astrology and the Oracle Principle". The phenomenon of synchronicity, on which techniques of divination and the art of astrology are based, challenges our faith in linear time and the ubiquity of the law of physical cause and effect. It also challenges the exclusively rationalist-materialist worldview by suggesting that the inner world of the mind and the outer material world of matter may not be as separate as we believe.

In this talk, and in her book on synchronicity, hopefully published in 2017, Phoebe showed how synchronicities open a peephole in the wall of conventional scientific thinking to reveal dimensions beyond the material and support the paradigm shift from the conception of the universe as a machine to seeing it as a living, intelligent organism in which we all participate. Experiencing a case of synchronicity pulls us up in our tracks. It's as if we've encountered a flaw in the fabric of reality. David Peat in his book on the subject calls it 'the joker in the pack' because these meaningful coincidences have the power to upset our ordered, settled worldview.

Jung, who had had some strong personal experiences of synchronicity while he was investigating the *I Ching*, became excited by it. It seemed to him he was on the brink of discovering a new connecting principle additional to that of cause and effect, and he researched it for many years before publishing his conclusions in a work titled *Synchronicity: an a-causal connecting principle*.

In the 1930's an exchange of ideas took place between Jung and the physicist Wolfgang Pauli, who, with his knowledge of quantum mechanics was able to place Jung's experience of synchronicity in the context of modern physics. When he described the quantum level to him, Jung recognised its similarities with the collective unconscious he was investigating in his field of depth psychology. The two scientists concluded that perhaps they were approaching the same thing from different directions. From the perspective of physics, it appeared then as the ground of matter, and from that of depth psychology as the deepest strata of the collective unconscious. Then Pauli commented to Jung that the flow of waves and particles on the quantum level appeared to him more like the workings of a vast mind than anything material.

As it happens other eminent twentieth century scientists were thinking along the same lines – Sir James Jeans for example, said, 'the universe begins to look more like a great thought than like a great machine.' If he is right, then all that exists are thoughts in a cosmic mind, which must have the power, through thought, to create substance and fashion material reality.

When Phoebe met this idea it fascinated her, and her book, *Inside the Cosmic Mind* (Floris Books, 2014) introduces the model of a nested hierarchy of minds to describe the hypothetical relationships between the different levels of mind in the universe. It's a useful model for demonstrating the oneness and inter-connectedness in the cosmos.

Today science is gradually coming closer to the conception of the universe as a living, organic, interconnected whole. On the sub-atomic level, where nature stores its information, quantum

entanglement shows this connectivity. There information is passed on instantaneously through the links between particles, even when they lie far apart in the universe. A more informed understanding of the mechanism of vision has now led us to conclude that our minds, with their expectations and intentions, contribute to creating what our eyes then see. And convincing proof of the power of human intention to influence events in the objective material world has also emerged from many scientifically robust trials. Thus the conclusion we reach is that no clear line between subject and object can be drawn, which is relevant for understanding the phenomenon of synchronicity.

Phoebe explained that events in the natural world emerge from underlying invisible fields of information. From its source on the quantum level, this information then unfolds on denser levels to create objects and events, or to mould the contents of our inner thoughts and imaginings. In other words, information can manifest either physically or psychologically, or in both ways in parallel, suggesting that this latter option is what occurs when we experience a meaningful coincidence.

Astrology is based on synchronicities, the primary one being the correspondence between the macro- and microcosms, or our outer and inner worlds. 'That which is above is like that which is below' stands carved on the emerald tablet of Hermes Trismegistos, which is not news for the astrologers who experience daily in their work that the realms of mind and matter mirror each other. When they draw up a birth chart they follow the precept of 'as above so below', and when interpreting it they rely on the correspondence between the configurations in the heavens and the personality and life patterns of a client.

That the macrocosm and the microcosm mirror one another can be explained if in their ground in all-encompassing cosmic mind they are one and the same. Then it's conceivable that the thought processes in an individual mind could mirror those in the great cosmic mind. And the patterns formed by the planets in the sky could mirror events in the world below. Thus astrology, together with synchronicity on which it is based, leads us to a view of life in which everything we experience in our three dimensional world is symbolical of truths existing in a timeless cosmic dimension beyond the range of our human senses.

Sydney Group – Jean Ingman

Report of the Meeting of the Scientific and Medical Network Sydney Group February 26th 2017

David Burfoot talked about his book "Finding the Elephant. Subspace, the Mega-Phenomenon." We welcomed David to the meeting which was attended by 13 people with two apologies for absence. Following introductions David talked about how he came to write his book. He wanted to find out more about life following the deaths of his mother and two brothers, and his experience working in special development situations overseas. He started researching the possibility of having a TV show bringing together people from different disciplines to debate big questions.

What he found that separated them was not so much the subject matter, but the politics between different disciplines. This gave him the idea of using the fable of the six blind men and the elephant to show how if people worked together they would find out a lot more. The fable helped people examine information outside their own speciality and interest, without them feeling as though they were going to lose something in the process. Like the blind men and the elephant modern research knowledge, if pooled, can combine to reveal interesting phenomena, like 'subspace'.

The discussion continued with heuristics and how learnt behaviour and biases can get in the way of decision making. We were then shown a variety of images to illustrate how the brain 'makes things up'. David went on to talk about the brain being a 'middle man' between reality and the subjective perceiver, i.e., and that various biases like 'moral licence' and a 'self-serving' bias, meant that he mind will favour self in providing information to the perceiver.

The discussion then turned to Daniel Kahneman and fast and slow thinking. Expertise can blind you to innovation. With fast thinking the memory is working automatically, effortlessly, while the slow thinking mind calculates and supervises. Mostly fast thinking works well but we need to recognise when to think carefully and not be overconfident.

David went on to talk about Einstein, space/time and relativity, Max Planck and quantum physics, which turned science upside down. Then the awareness of the moment and the ability of consciousness to affect the outcome, and the placebo effect working throughout

medicine. Other topics included the Ganzfeld effect and psi research and connectivity, neuroplasticity and reprogramming the brain, multiple personality disorder with physical as well as mental changes, and global consciousness being effected by major world events such as 9/11 or Princess Diana's death. He also asked if we are in a computer game and if so who/what is running it?

The discussion then centred on delayed choice quantum eraser, particles becoming waves, the observer effect and information travelling both forward and backwards in time. Past present and future are one. This prompted considerable exchange, especially regarding whether we can change our past. We also talked about TRIZ, TIPS, Ken Wilber and Integral Theory, Edward Witten and M Theory and String Theory. The integral view would suggest that everyone is right in some way, like the blind men and the elephant, but only partially. It was an extremely interesting discussion by the author of a very informative, entertaining up to the minute book with brilliant illustrations. The afternoon was thoroughly enjoyed by everyone.

North Wales

Eric Franklin

When I announced the series of sound-healing sessions with Hara Willow as our one event in eight weekly parts here in Lampeter during February and March 2017 I used, among others, the following words: "Within the wide area of conscious experience that we call 'mind' we find a number of modes of healing, the making whole of the mind and the body. Even psychoanalysis, mediated indirectly via words, seems somewhat efficacious (albeit extremely slow), but the other bodily senses seem also to convey beneficial effects, often through a gentle trance state which sets deliberate logical cogitation aside, and seems to influence future consciousness via direct effects on the brain. Mankind's pre-occupation with the subject has given rise to a variety of practices, including for examples shamanism, Santo Daime, Transcendental Meditation, and many others, all warranting our attention and honest research."

As a result of reading my introduction Dr Nicola Miller contacted me to tell of her research, using the MRI scanner, seeking the connections between listening and the body's small but sensitive, and largely unnoticed, responses. This research is intriguing to the scientific mind, and probably lies near one extreme of a wide range of effects brought about by sound, but what I had in mind myself was a direct effect of returning neuronal systems to a neutral state, a kind of resetting of a 'tabula rasa' ground-state, by means of sound and a light trance, which might heal memories, or free the mind from trauma to allow it to act thereafter without neurosis.

Pre-scientific minds may have discovered such healing means. Certainly what Hara Willow offered us would not be considered scientific by most Western minds, but might lie at yet another distant point in that range of postulated effects. Her sessions seemed to be based upon what I would describe as intuitive practices of a wiccan kind, and healing might well result in susceptible minds, but the approach was via practices and rituals taken from a variety of shamanic and yogic or tantric traditions. For example, early in the sessions Hara used the chant 'Aum gam Gana pata ye namaha' by which one calls upon Ganesha, the Hindu elephant-headed god, to assist in removing obstacles to achieving one's healing goals during the eight weeks of sessions. I wondered whether some might find their desired healing via meditation having less cognitive content, and whether the beta-wave attention needed to learn and speak a chant in an unfamiliar language from an unfamiliar culture would be counterproductive.

Something near to Western, Freudian, psychology was expressed by Hara in the following words, written to participants after one of the sessions: "We discussed mental patterns, habits of thinking, which make neuronal connections in the brain and which after repeating over time eventually lead to the creation of literal physical grooves in the brain. These patterns are then set. However, we can create new patterns (to replace the old ones) by becoming aware of those that cause us imbalance or pain (usually fear based) and by not acting on them, but by acting from a place of love and trust instead. Simple but not easy. This practice of acting 'as if' enables us to create new patterns even if we don't actually feel the trust. We can literally create it by practising."

This may be true, of course, but it is unlike the alpha-wave meditative state I had imagined myself as a possible means of washing out harmful data and resetting an empty ground-state by means of sound. Perhaps there are indeed many modes along that range of possible healing techniques. As the reader will discern, the eight weeks of Hara Willow's sessions, each session grounded in a different segment of 'The Medicine Wheel', could be repeated and developed in future

cycles, just as further sessions of psychotherapy might accumulate benefits. In this way, a person might bring healing to his or her own mind via a personal psychosynthesis, whether using existing traditions and teachings or not. But perhaps Dr Miller's research into the links between sound itself, including meaningful but non-verbal sound such as music, and the responses of the somatic system, would be at least equally fruitful, and more direct.

GRAMPIAN GROUP

NICOLA MILLER

March 2017

Paolo Maccagno, an anthropologist, Feldenkrais practitioner[®] and marathoner, was our speaker in March. He began his talk with a story from an African tribe where, in the middle of a thunderstorm, a woman went out into the forest. The strange atmosphere gave rise to a powerful experience which she was moved to express by singing a song. On returning to the tribe, she wanted to share her song. Normally, Paolo said, anthropologists would be interested in the song, or the culture surrounding the song. But the artist recounting the story, Bill Viola, was more interested in being with the woman in the forest when she started singing. His interest lay in being "on the front line, right there where something new is coming into the world," to "bring forth" the experience itself.

After working 15 years as a landscape architect, Paolo began to run on a regular basis, a "crazy idea," he said. Over time, he started to notice that, through this "powerful practice," he was beginning to see people and the world differently. He began to experience the feeling that "everything was possible." This experience led Paolo to think about running marathons and, in particular, the 'wall' of the marathon and the idea of the 'limit.' Some but not all marathon runners hit this wall after covering around 35-42 Km when they appear to run out of energy. They have reached their limit.

Paolo's interest lies in the nature of the physical, psychological or cultural factors that underpin this phenomenon. By way of illustration he showed an image of an arm wearing a watch. The arm was 'tattooed' with the times by which the runner should reach particular parts of the route, thereby putting pressure on the runner to be "on time." At around 35 km, these values can start to lose their meaning. Runners may begin to wonder "Why am I doing this?" and start to lose power over their "self." In Paolo's experience, if the runner's mind is only focused on time, they are likely to face and probably fall at, the wall. He suggests that to really run, you should run as if you're going to run forever. Yes, there is a lot of preparation before the race but, if you want to finish, all thought of this must be shed when you start running. The wall, or limit, expands and becomes space, and with this expansion, comes the potential to explore. Paolo described continuing to run without knowing why you're really doing it as a very transformative experience. *When I run I forget who I am!*

Returning to anthropologists, Paolo talked of their interest in lines or borders between states before reminding us that in the past, divisions between states were often spaces called margins. These were often deserts or virgin forests, spaces which offered freedom to interact. His notion of 'limit' therefore, is more like a margin that provides the space and the freedom to explore. But what, he asked, is the meaning of exploration? To answer this, Paolo drew on the words of Tim Ingold "Research is the pursuit of truth through the practice of curiosity and care." and St Francis, "The truth is not the knowledge we have of it but the joy that it gives us." He highlighted the practice of care as being existentially meaningful, and the importance of caring for yourself as well as for others. Facing a wall or a limit "demands a movement of exposure (that downsizes) the arrogance of meaning and (accepts) its intrinsic fragility. It is that acceptance that can be a path of care for humans."

Paolo learnt to trust the gesture of running without really understanding why he was doing it and found that this gave him the capacity to face situations "without protections." He took his experience and insights into prisons in Milan/Italy where he coached and ran with prisoners as they prepared to run the Milano Marathon. During the course of the project he had to find ways to challenge numerous borders/lines/divisions related to prison practices and procedures. Even at the very last minute there remained doubt as to whether the prisoners would be able to run the marathon.

To see the successful conclusion to this project, please see YouTube "Forza papa! The dream of the marathon." I'm sure you'll enjoy it.

<https://www.youtube.com/watch?v=wdOIXV4SZ14&list=UU1uiSL6xZVYE9gubBB682Q&index=6>

A similar project in Peterhead prison, Scotland, is now underway. Paolo's talk was thought provoking and extremely well received judging by the questions raised in the discussion that followed.

Biography

Ongoing life-research into the notion of limit focusing on movement, body and touch. Currently a PhD student in anthropology at the University of Aberdeen under the supervision of Professor Tim Ingold and Dr. Jo Vergunst. Contract professor for the chair of pedagogy of the body (Prof. Ivano Gamelli) at the Milan-Bicocca University. Registered with the UK Feldenkrais Guild. Recent publications: *Lungo lento. Maratona e pratica del limite* (Quodlibet - 2015), *Running Walls: the performance of the limit in prison* (Scottish Journal of Performance - 2015), *Through these walls* (Like the wind magazine - 2016), *Solitudine esposta* (Magazzino di Filosofia - 2016), *Running North* (La Repubblica - 2016), *Guidare libertà* (Amica Sofia magazine - forthcoming 2017).

GUILDFORD GROUP GERRI MCMANUS

Because of work commitments the convenor of the local Guildford Group needed to change the meeting date from a Wednesday to a Thursday but this resulted in very poor attendance so the Guildford Group has been effectively dormant for a year or so. However, Gerri McManus is now proposing to run monthly Local Group meetings in Godalming on a Sunday, early evening - with a talk from 5:30pm followed by an early supper. Those interested please email Gerri at gerri.mcmanus@gmail.co.uk to indicate support and any suggestions for forthcoming topics/speakers.

MEMBERS ARTICLES AND ARTICLES OF INTEREST

Available from the editor or through links – dl@scimednet.org

SCIENCE

"Life, Environment and People: my inclusional educational approach to encouraging creative and discerning scientific understanding of our natural human neighbourhood"

Alan Rayner (3 pp.)

Life and Consciousness – The Vedantic view
Bhakti Niskama Shanta (12 pp., from Communicative & Integrative Biology, 8:5, e1085138, DOI: 10.1080/19420889.2015.1085138)

PHILOSOPHY/SPIRITUALITY

Pre-modern Interfaith Dialogues with Special Reference to Nicholas of Cusa
Michael J. Langford (13 pp.)

The Supernatural and Modern Thought – with special reference to Alfred Russel Wallace
Charles Smith (15 pp)
<http://people.wku.edu/charles.smith/wallace/S174.htm>

'In Accordance with Their Own Nature': Women and Equality in the Catholic Church
Jo de Groot BSW PhD DipEd (9 pp.)

PSYCHOLOGY

Digital Consciousness and Platonic Computation
Simon.X.Duan PhD, Metacomputics Labs, UK (13 pp.)

The Existence of Spirits
Andris Tebecis, PhD (12 pp)

ECOLOGY

Greening the Hot Deserts (and ppt)
Dr Anthony Fox (6 pp.)

Interview: "Wholeness & the Environmental Crisis"—Jeffrey Kiehl, Ph.D., with Bonnie Bright (7 pp.)

GENERAL

Trump and the Post-Truth World

Ken Wilber (80 pp.)

Evaluating youth character development programs using evolutionary evaluation and the systems evaluation protocol
Jennifer Brown Urban et al (14 pp.)

To link to this article: <http://dx.doi.org/10.1080/10888691.2017.1285236>

Online publications by Rolf Sattler

Wholeness, Fragmentation, and the Unnamable: Holism, Materialism, and Mysticism - A Mandala

http://www.beyondwilber.ca/books/mandala/mandala_of_life_and_living.html

This book is based on a mandala with the unnamable in the centre and the namable of holism and materialism/mechanism at the periphery. In 12 chapters it examines the relation of our materialistic mainstream culture and science with holistic alternative culture and science on the background of the unnamable mystery. One appendix is on the Human Condition, another on Lessons from the 20th century for the 21st century.

Science: its Power and Limitations

<http://www.beyondwilber.ca/about/science/limitations-of-science.html>

A very comprehensive analysis of the power and especially the limitations of science in its various forms.

Plant Morphology

http://www.beyondwilber.ca/about/plantmorphology/plant_morphology.html

A wide-ranging discussion of plant morphology with special emphasis of continuum and process morphology that I elaborated during my scientific career as a plant morphologist.

Toward better health and more sanity in our life and society

<http://www.beyondwilber.ca/health/health/health-sanity.html>
An examination of health and sanity of the mind, speech, and the body, including the physical, subtle, and very subtle (causal) body.

Ken Wilber's AQAL Dogma

<http://www.beyondwilber.ca/AQALmap/AQAL-dogma/ken-wilber.html>
A very critical appreciation of Ken Wilber's AQAL map of the Kosmos.

ONLINE ARTICLES BY ANTHONY JUDGE

Public Enemy #1 as Supreme Leader?

Thinking otherwise about framing the engagement with society's worst fear
<https://www.laetusinpraesens.org/musings/selfmarg.php>

Empowering Ineffectual Outrage with the Strategically Outrageous

Beyond reactive protest, demonstration and resistance
<https://www.laetusinpraesens.org/musings/outragus.php>

Indians? Witches? Natives? Jews? Islamists? ETs? Eradication as genocide – now and then?

<https://www.laetusinpraesens.org/musings/eradanew.php>

Zen of Facticity: Bull, Ox or Otherwise?

Herdin facts and their alternatives in a post-truth-era
<https://www.laetusinpraesens.org/docs10s/zenbull.php>

Psychosocial Transformation by "Pill Pushing"? Model-making, strategic advocacy and the myth of the "red pill"

<https://www.laetusinpraesens.org/musings/redpill.php>

book reviews

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

science-philosophy of science

Questioning New Physics

Paul Kieniewicz

Fashion, Faith and Fantasy – in the New Physics of the Universe Sir Roger Penrose (Hon SMN)

Princeton University Press, 2016,
501 pp., £19.95, p/b -
ISBN 978-0691119793

Roger Penrose is not only a great physicist, but a great communicator of complicated scientific issues that embrace mathematics, physics, artificial intelligence and cosmology. At age 85, he has published a remarkable tour de force that depicts the state of modern physics.

The title of his book suggests that he proposes to question whether many of the fashionable ideas in physics, generally accepted as true, are all they are cracked up to be. Chief among those are string theory, superstring theory, cosmic inflation, and quantum field theory. After examining them in some detail he finds them wanting. He is convinced that today's version of quantum mechanics is provisional, waiting for a new formulation that will resolve some of its problems, in particular the difficult problem integrating the effects of gravitation into quantum effects.

This is a very technical book, written primarily for physicists, cosmologists and others who have at least an undergraduate grounding in those fields. The lay reader may find the technical level challenging. However, a simplified version of the book would not have worked because the arguments that Penrose raises are subtle, requiring a detailed knowledge of the field.

Of many fashionable theories, Penrose first takes aim at string and superstring theory. String theory became popular because of its inherent elegance. Its original version purported to show that all elementary particles can be explained as different modalities of vibration of elementary strings. A wonderful unifying theory! Unfortunately,

by the early 1970s, it became clear that in order for the theory to explain observable quantum rules, it required a world of 25 dimensions. In the 1990s, a later development called M-Theory pared down the number of dimensions to eleven. Penrose examines in some detail the problems that arise as a result of the extra dimensions. Chief among them is "functional freedom" of the strings that rapidly becomes infinite. Regarding supersymmetry, a development of string theory, Penrose takes the position that the theory is not falsifiable. There are so many types and versions of string theory, that if one version is disproved, there remain an infinite number of others. There is no experiment, performed or to be performed, that could put the nail in the coffin of string theory.

When writing on modern cosmology Penrose raises significant issues that many cosmologists still tend to sweep under the carpet. Chief among those is the low entropy of the Big Bang. The present day cosmic microwave background is at thermal equilibrium, but at the time of the Big Bang, the entropy was vanishingly small. More, it had highly restricted degrees of gravitational freedom. How did such an unlikely event arise? Cyclical models of the universe offer no answers as a universe that implodes on itself, creates a high entropy black hole, not the low entropy situation of the Big Bang. The most popular theory to explain the evenness of the cosmic microwave background is inflation – the notion that the early universe underwent a rapid expansion as a result of a (as yet unidentified) "inflation field". Penrose doubts whether this took place. Given that the initial singularity was extremely uniform, with restricted degrees of freedom, its expansion would have resulted in a uniform cosmic microwave background, without the need for inflation.

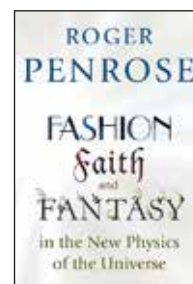
Penrose looks also at the Anthropic Principle. He takes seriously the fine tuning of many physical constants, that we live in a special universe that appears designed for the development of stars, galaxies and eventually life. However, he feels that the Anthropic Principle does little to explain the low entropy of the Big Bang – unless the latter arose purely by chance. An explanation via multiple universes, some of which contain life but most of which are dead, he regards

as a cop-out. As with superstring theory, he regards the multiverse hypothesis as non-falsifiable.

The fine tuning of physical constants, and the low entropy of the Big Bang, could all be explained, according to Penrose, by his Conformal Cyclical Cosmology. While he proposed the idea over ten years ago, its mathematical details are yet to be worked out, so the theory is mostly conceptual. In this model, we live in a series of universes. The present universe is only one of many Aeons. It will continue to expand at an accelerating rate. Galaxies will eventually collapse to form supermassive black holes that will themselves evaporate via Hawking Radiation. Even the Higgs Bosons will decay. All matter will dissolve to form a sea of energy. This sea of energy will be the seed for the next Aeon, the next Big Bang. However, information from one Aeon can be transferred to the next via evaporating black holes. Thus, physical constants can be passed on down the generations of universes. He points to observed anomalies in the cosmic microwave background that could have resulted from collisions between black holes in the previous Aeon. However, for most cosmologists those observations remain controversial.

In summary, this book offers exciting insights into the boundaries of modern physics and cosmology – a look at some of the greatest controversies, what is unknown, and also what may remain unknowable. The writer also makes a compelling case for why many popular ideas in physics today will eventually have to be abandoned; why quantum mechanics will most likely be superseded by a new, more embracing theory. He offers a few suggestions for ways out of many contradictions in physics, but he also admits that he does not know how or where the next developments will occur.

Paul Kieniewicz (SMN) is a geologist, astronomer and writer. He is the author of *Gaia's Children*, co-author with Andrew Glazewski of *Harmony of the Universe*.



Belief Perseverance

David Lorimer

QUANTUM LEAPS IN THE WRONG DIRECTION

Charles M. Wynn and Arthur Wiggins, cartoons by Sidney Harris

Oxford, 2017 (2nd edition), 187 pp., \$35, h/b – ISBN 978-0-19-062029-5

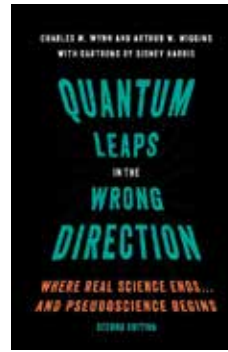
Belief perseverance is described by the authors (respectively a chemist and a physicist) as 'unreasonable resistance to change one's beliefs', a state they lament as irrational and based on what they regard as wrong evidence. Part of their update consists of what they call information about reliable websites and educational modules. If one consults these, one finds that they consist entirely of sceptical websites and educational modules all from the James Randi Educational Foundation. In addition, the bibliography consists almost exclusively of sceptical references. In other words, reliable equals sceptical, which itself entails a belief perseverance in the adequacy of naturalism and physicalism. The authors envisage three groups of readers: one unfamiliar with the phenomena where they hope useful insights will be gained, secondly those acquainted with the phenomena and already in agreement with their conclusions, and thirdly, including the present reviewer, 'already acquainted with the phenomena and already in disagreement with our conclusions.' This is the group they feel tend to adhere to their beliefs, even in the face of contradictory evidence and even when explanations are shown to be irrational or based on 'wrong evidence'. Such people, they say, 'disregard evidence inconsistent with or contradictory to their belief' and are subject to potential flaws in their reasoning or observation process.

The assumption or equation here is scientific = naturalistic = rational, hence pseudoscientific = supernatural = irrational where rationality is associated exclusively with a sceptical view. By this logic, a rational scientific explanation has to be naturalistic, as TH Huxley insisted when arguing with Alfred Russel Wallace. Writers like the present authors are very rarely explicit about their own assumptions, while criticising those of others. The first two chapters give a good account of the scientific method and scientific reasoning in action, stating that scientists should not become too attached to their assumptions. The issue here is how to balance openness with rigour, a balance that the Network seeks to maintain. Scientific materialism holds a naturalistic presumption as a point of departure for explanations of phenomena, while also holding to what Sir John Eccles called promissory materialism: if it has not yet been explained naturalistically, it soon will be - including consciousness. The book goes on to consider what the authors call the five biggest ideas of

pseudoscience: UFOs and alien abductions; paranormal out of body experiences such as astral projection, near death experience and entities such as spirits and ghosts; astrology; creationism and paranormal powers such as ESP and psychokinesis. In this review I will address their comments on the areas with which I am most familiar, namely the second and fifth.

Before doing so, I would also like to comment on the oft-cited remark of Carl Sagan that extraordinary claims require extraordinary evidence. This statement itself embodies a cultural position about what is or is not extraordinary in terms of what CD Broad called antecedent probability. The antecedent probability of the existence of the phenomenon depends on your assumptions about it: if you regard ESP *a priori* impossible, then any ostensible instance must be due to fraud or poor experimental design. For the person for whom ESP is an everyday reality, it is no longer extraordinary. The discussion on NDEs is selective, incomplete and in some cases misleading in bringing in the phantom limb example. While the oxygen deprivation hypothesis is correctly set aside, the authors support a neurochemical explanation. No mention is made of the work of Bruce Greyson, Peter Fenwick, Pim van Lommel and many others - especially the work on cardiac arrest and the collections of veridical OBEs. Although these are anecdotal, they still require to be explained and raise intriguing questions about the nature of perception. The authors remark that veridical reports could have been obtained by ordinary means - 'through the senses both before and during the procedure.' This is a typical off-the-shelf sceptical argument dealing only with generalities and completely failing to address the specifics of particular cases. The authors are equally cavalier in their treatment of apparitions and simply state that naturalistic explanations abound for such phenomena. The section on reincarnation and past life memories is equally inadequate, citing only one case and failing even to mention the extensive research of Ian Stevenson and his colleagues. Even Carl Sagan was impressed by this research and regarded it as a question mark for the completeness of scientific naturalism.

Moving on to the chapter on normal sensory perception, ESP and psychokinesis, there is a good description of the mechanics of perception and the authors mention the 20 year CIA research programme on ESP without analysing the evidence it produced. Claims for psychic experiences are regarded as 'merely odd



coincidences that command our attention.' Here again we have a general off-the-shelf argument claiming that we often think of people and they don't phone. This totally disregards the uniqueness of, say, deathbed apparitions, where the subject has no idea until after the event that the person concerned has died. This is a one-off rather than everyday occurrence, perhaps only once-in-a-lifetime, so the coincidence theory cuts very little ice.

The rest of the chapter continues in a similar vein with 'alleged observations of extrasensory perception', failing to mention, for instance, the studies and meta-analyses reported by Dean Radin covering decades of scientific research. They conclude that if nothing really happened in the first place, there is nothing to explain - and the uninformed reader is supposed to take this on board as if the authors' investigation had been complete and unbiased.

The chapter on alternatives to medicine takes a similar approach, lumping together a very wide range of phenomena but adopting a generalised approach - some areas they deal with are much less established than others, but no mention is made of the multi-million-dollar funding given by the National Institutes of Health is to support research in this area, even if this is a tiny percentage compared with the orthodox field. In their conclusion, this lumping together continues, creating the impression that better researched areas are all equally wacky. The prejudice of the authors shows through in their dismissive and insinuating conclusions about the areas we have treated: 'out of body experiences and entities are observed by people whose imaginations have gotten the best of them, by people in an altered state of consciousness, by people who report the phenomena for ulterior motives, and by people who have been deliberately deceived by con artists.' (p. 142-3) To think these phenomena are real is mere wishful thinking. Then, on ESP and PK, observation of these phenomena 'is tenuous at best' and the 'hypotheses difficult to evaluate because of the questionable nature of the phenomena they purport to explain.' Then part of the rest of the chapter is devoted to hoaxes, including the 'crop circle hoax' where the authors swallow the long discredited 'Doug and Dave did it all' hypothesis as if this all stopped in 1991.

They conclude that their interpretation of these phenomena is the road to reality, contrasting with the road to illusion - giving an accurate view of reality instead of a deluded one. They then give a series of standard sceptical recommendations for further reading, quack busting and debunking. The uninformed reader might be impressed and taken in by the superficial rationality of the arguments

presented, but the informed reader without a prior commitment to scepticism and scientific materialism will realise that the treatment of the phenomena is both incomplete and inadequate, demonstrating the confirmation bias of the authors and their own belief perseverance in ignoring evidence that might challenge their own assumptions. I would certainly not disagree with their strictures on some of the more outlandish phenomena they discuss, but their treatment of serious areas of research is nothing short of misleading and intellectually disreputable.

Macroshift

David Lorimer

WHAT IS REALITY?

Ervin Laszlo (Hon SMN) and others

Select Books, 2016, 335 pp., \$22.95, h/b – ISBN 978-1-59079-391-6

THE LASZLO CHRONICLE

Gyorgyi Szabo

Select Books, 2017, 320 pp., \$22.95, h/b – ISBN 978-1-59079-396-1

THE WORLD ACCORDING TO LASZLO

Gyorgyi Szabo

Ariane Books, 2016, 206 pp., \$13.95, h/b – ISBN 978-2-89626-308-0

Ervin Laszlo is celebrating his 85th birthday this year. Quite a few of his books, including his autobiography, have been reviewed on these pages, but for those who are unfamiliar with his life, he began as a concert pianist and then moved into evolution and systems theory in his 30s. He has been developing a series of important ideas over the last 50 years. The first book here is his latest publication describing the new map of cosmos and consciousness, the second a major analysis of the development of his ideas, and the third, by the same author, a more informal portrait and introduction to a universal man.

Taking the third book first, it falls into three parts: initially, Ervin on himself, then the author's own view and that of his wife, Carita, and younger son Alexander. It is clear that Ervin is a very private person who is hugely creative, productive and driven. This comes out in an amusing way when Carita used to ask Alexander to call Ervin to the

table, which he did with some trepidation as he knew he was by definition disturbing his train of thought. Connecting with Nature and the world is very important for him while he reports that his greatest joys are intellectual

pleasure, listening to music, tasting great food and driving elegant cars. He sees this as moving and developing, and his life as a whole as a form of being and becoming that has not been wasted. Gyorgyi re-visits many places that have meant a great deal to Ervin at different times of his life and participates in quite a number of recent significant events.

In addition, there is a comprehensive interview on the Akasha paradigm, which appears in both books. The last part conveys some vignettes of his everyday life, in which Carita is always a beautiful and supportive presence. Ervin keeps himself in good shape with morning exercises and stretches. He himself provides the inside story of the previous eight years in the final chapter, commenting on a fundamental change within himself from world-transformation to self-transformation, as one cannot change the world without changing oneself. His work has been a search for logos in terms of meaning and intelligence, but he has now come to the realisation that the fundamental answer is love: 'the deep, ineffable, numinous and undefinable feeling of *being one*.' Moreover, he has concluded that we are and remain part of the world through an evolutionary cycle of birth and rebirth – hence our responsibility to play a creative and constructive role in this process.

The Laszlo Chronicle gives readers a very clear insight into the development of Ervin's thought across a range of topics. It begins with the discovery and development of his systems philosophy and the influence of Whitehead, Von Bertalanffy, Bohm and Prigogine. This leads on to the application of the systems concept to world order and general evolution theory, not only as an idea but also in terms of realisation in the life of society. His work on a unified information field theory has gone through a number of phases, starting with the idea of the psi-field, moving through the fifth field to its more mature expression in the Akashic field and paradigm. The use of the word Macroshift arises within the context of bifurcations, tipping points (breakdown and breakthrough) and the evolution of worldviews from what he calls *logos* to *holos*, from separation to wholeness. Ervin's participation in the Club of Rome and his founding of the Club of Budapest have enabled him to become an expert on world transformation. The conclusion lays out the principal results of his philosophical work from systems theory to the study of consciousness and the theory of universal information field. This is the best introduction to Ervin's work for the general reader.

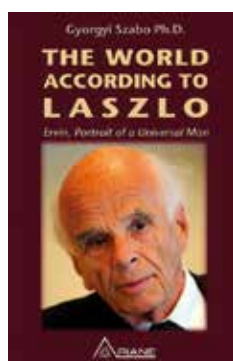
What is Reality? follows on from *What is Consciousness?* The direction of Ervin's thinking has been towards ever more integral models of reality and wholeness, conceptualised as the 'deep dimension' where everything is connected in a seamless, irreducible whole. The Akashic

Holofield is the primordial ground of the universe, a concept very similar to the Universal Mind of Walter Russell, out of which everything unfolds and into which it re-folds - also parallel to the implicate and explicate orders of David Bohm. The basic reality is 'the intelligence that co-ordinates the clusters of vibrations that appear as object-like and mind-like phenomena. Ervin proposes an in-formed vibrational universe in which object-like clusters of waves vibrate at a high frequency in the spectrum and mind-like clusters at a lower frequency. Critically, the manifest entities of the universe are 'phenomenologically distinct but not ontologically separate.' (p. 14) We are one in the deep dimension. The world is not a giant mechanism but 'a unitary realm of in-formed clusters of vibration.' (p. 46)

The three parts of Ervin's contribution address cosmos, consciousness and existence. In discussing consciousness, Ervin takes full account of anomalies that cannot be explained by scientific materialism, proposing that 'the enduring essence of consciousness extends beyond the brain, transcending it and capable of existing independently of it.' (p. 39) This means that birth and death are both phase transitions in an out of different levels of existence. Moreover, 'the universe is entangled in all of its relationships and acts as ONE.' (p. 101) A manifestation of this oneness is the emphasis on increasing coherence. For Ervin, the logic of life is towards coherence and wholeness, through interconnection and interaction.

The book also contains further explorations of the new map, with a foreword by Deepak Chopra and an introduction by Stanislov Grof – the latter with his notion of holotropic, moving towards wholeness. Well-known authors contribute their reflections on the new map in physics, consciousness, the nature of existence, then wider horizons. Nitamo Montecucco gives a striking illustration of coherence in the brain, Jean Houston gives her take on the mystical path, Stephan Schwartz elaborates his own map in terms of a scientifically grounded consciousness-based reality, Chris Bache shares his insights from psychedelic communion, Alexander Laszlo reflects on synergy as evolutionary consonance, and, on the practical side, Kingsley Dennis gives guidance on conscious agency for planetary wholeness.

The final part returns to Ervin's own thinking on meaning. He explores purpose in Nature with respect to the coherence of physics and the evolution of complex coherent systems. The ultimate meaning cannot lie in the evolution of these systems as they will ultimately disappear. However, Ervin makes a good case for the meaning and purpose of the universe lying in the evolution of consciousness: 'we are here to evolve the consciousness of the cosmos by



evolving our own consciousness. We can pursue this task throughout the cycle of our existence.' (p. 263) While on Earth we can tune into this deep oneness and express it in unconditional love. Ultimately, we can reach a state of resonance with the intelligence inherent in the ground state of the cosmos. In other words, we vibrate and manifest love and wisdom.

There is no doubt that Ervin is one of the great visionaries of our time. He has plumbed the depths of cosmology, physics, biology, systems theory, evolution and consciousness and come up with a coherent vision of reality and the purpose of existence to which we can all subscribe. His latest book does indeed provide a more than adequate map of reality that is consistent with our emerging planetary consciousness and ethic. Having understood this, it is critical to apply its implications to our current challenges and forge a holistic vision of our planetary future beyond existing polarities and power politics. The signs of breakdown are all too apparent, but green shoots are breaking through. We are in a massive phase transition as a species and it is critical that we hold this vision of wholeness through this transitional process. Ervin's life and work has been dedicated to this noble task.

Cosmos and Consciousness

Ervin Laszlo

YOU ARE THE UNIVERSE Deepak Chopra & Menas Kafatos

Harmony Books, New York 2017, 276 pp., €26, p/b - ISBN 978-0-88916-4

It is a rare pleasure to write a review of Chopra's and Kafatos' new book, *YOU ARE THE UNIVERSE*. It is also somewhat vexing in that I agree with nearly every word in it; after all, a reviewer is expected to say at least one thing that he/she knows better than the author or authors. In this case, however, I can say with Oscar Wilde, "I wish I'd have said that." And I can also appreciate the expectation of his friends who remarked "You will, Oscar, you will."

I will indeed myself say what this book says, with due credit of course to its authors. I will affirm and re-affirm these ideas, concepts and principles, because I have already said them in my own formulation in various books and articles. We have been thinking along similar lines and, even more, our thinking has been evolving along similar lines. We are now asking the same questions and giving the basically same answer. We are formulating it in different ways; but that is not a problem—agreement does not require repetition.

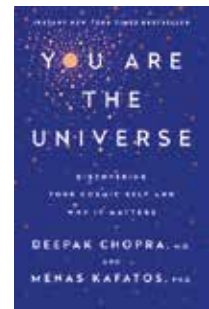
The crucial issue behind accepting the proposition of this book—namely, that "you are the universe"—regards the

fundamental nature of the universe. Before we could say whether the universe is you or I, or everyone or no one, we have to know if it is the result of a random concatenation of things and events, or if it is determined in some way. Scientists abhor determinism because in the classical Newtonian framework it suggests determination by a mechanism—a sublime mechanism but a mechanism just the same, where the past determines the present and the present determines the future. This hypothesis is outdated and is rightfully relegated to the dustheaps of history. But the alternative to it is not randomness and serendipity. A thing or event in the universe need not be either purely aleatory or fully determined or, even worse, pre-determined by all that went on beforehand. There is another alternative, and that is difficult to accept for a classical-physics trained mind (although not for a quantum-physics oriented one), because that alternative is that the given thing or event is just more likely to happen than some other thing or event. This can be expressed in the formula, when condition A obtains, the probability that B will follow is greater than that C will follow. This expresses a form of preference—the preference for B under condition A, relative to C.

The idea of preference in nature is hard to accept in natural science, because it smacks of something that classical science excluded from nature, namely "choice." If the thing or event we observe is more likely to occur than another thing or event, nature demonstrates a preference for it. But does nature have preferences?

Scientists get around this problem by claiming that the laws of nature are simply such that under condition A, B happens statistically more often than C. No further explanation or interpretation is needed: all we need to do is to record this observed fact. This, however, does not do away with the problem, because the question why this happens is not answered. If not mere chance, then what is responsible for the higher probability of the observation of B? Randomness does not explain this and analogous phenomena. A random mixing of the elements that make up the universe would not create a significant probability that the genome of a fruit fly would result in the timeframe available for evolution in the universe, namely that which has elapsed since the birth of the universe in the singularity known as the Big Bang. In regard to anything more complex and interesting than the presence of inert gases in space, an additional factor must be involved. The student asking "if not by the determination of the past (of the rest of the universe) on the present, why then?" is usually told to keep quiet and just work on the equations. This fails in regard to the ultimate task of science, which is to illuminate and make understandable what is taking place in

the world. To be satisfied that B merely happens, is a cop-out. Why is it that it happens? Why is the world such that the laws that govern existence and evolution in space and time produce the universe we observe?



If the laws of nature make the universe what it is, and if what it is, is improbable under the assumption of randomness, some factor of selection must be at work. The search space of possible universes is enormous—why is it that this particular universe has come about rather than any of the myriad other universes that would be possible? Answering that we live in this universe, because otherwise we would not be here to ask about it, is the answer given by adherents of the anthropic principle, but it is not satisfactory: it is still the answer of serendipity, bolstered by the consideration that it worked for us, this time. But why did it work? We are back to square one. We cannot avoid acknowledging that some selection has been at work in the build-up of the phenomena observed in the universe.

Given that randomness cannot be the answer, our universe and all things in it must have been "selected" in the welter of alternative possibilities. Selection implies choice, and choice implies intention. The conclusion that appears is that the universe did not just happen to be as it is, it was brought about—perhaps, intentionally. This comes dangerously close to the notion of a Creator. It is the Creator who intended the universe the way it is. With this supposition we are beyond science, we are in the domain of theology.

The "creation implies creator" thesis is a leap in reasoning, and it is not necessary. The meaningful alternative is that creation and creator are one. The universe creates itself, because the universe is not random, it is not the product of chance: it is that what it intends to be. The universe selects and chooses to be the way it is, not by obeying an external agency, but by being that agency itself.

The thesis put forward by Deepak and Menas is that the universe is the way it is because it is how the cosmic consciousness that creates the laws of nature—and therewith the phenomena we observe in nature—behaves, comes up with essentially the same answer. I agree, with the proviso that "cosmic consciousness" is not something that acts on the universe, but is the universe itself. It is not a case of a creator acting on its creation, but of the creator creating itself. The universe

itself is the cosmic consciousness. It is a conscious, intending, selecting universe. I prefer to call this creative factor the “intelligence of the cosmos,” to highlight that this factor is the cosmos itself—it is its own intelligence—and that our consciousness is the way this intelligence is manifesting for us. The universe we inhabit, and we embody, is the cosmic intelligence that chooses and intends itself. Our consciousness is a reflection, a projection, a manifestation of the intelligence of the universe: of the intelligence that *is* the universe.

Here “hologram” is the applicable principle, because a hologram can be fragmented without losing its wholeness: all the information that constitutes it is present in all its parts. If the cosmic consciousness is a hologram (meaning that the universe itself is a hologram) your consciousness and mine is a fractal of the universe. And then we truly *are* the universe.

To remark on the last term in the subtitle of this book “why it matters” is obvious. If the universe is a hologram, then we are fractal elements of it: we are the universe. And being the universe is very different from being a separate or separable part of it. We are not the part; we are the whole. This is the new paradigm in science, and in all areas of inquiry into who we are, whether in religion or in spirituality, in business or in economics, or in politics. Discovering who we are matters more than anything other than our instinctive yearning for belonging and for giving and receiving love. Our inherent disposition for belonging and for loving, and our re-discovered insight into who we are, can together bring us back to the path we had nearly lost in the rudderless chaos of change and transformation. It is the path of the oneness of the world, and of our oneness with (and not in) the world.

philosophy-religion

Authoritative yet Mischievous

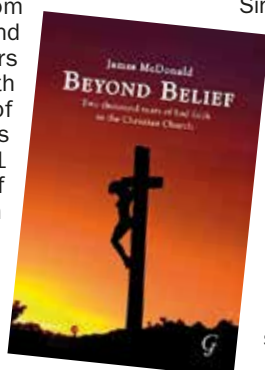
David Lorimer

BEYOND BELIEF

James McDonald

Garnet Publishing, 2011, 496 pp., £49.99, h/b – ISBN 978-0-863723-46-9

The title above comes from back cover of this critical and encyclopaedic book – 20 years in the making – dealing with the origins and history of Christianity. The scholarship is demonstrated in a total of 631 footnotes from a wide variety of sources. The author builds on the work of biblical criticism over the last two centuries, sharing the humanistic perspective of Voltaire, Gibbon, Thomas Paine, J.M.



Robertson, author of *Pagan Christs*, and Grant Allen, author of *The Evolution of the Idea of God*. The first two chapters deal with the reliability of Christian authorities in both the Old and New Testaments. The author points out that there are no original texts for any of the books in the Bible, that they have been subject to tampering, and that there are many internal contradictions as well as factual errors. He explains the history of the creation of the Canon of the New Testament, again full of contradictions and inconsistencies as well as additions and amendments to the original text along with errors in translation. All this is well known to biblical scholars, yet fundamentalists still insist that the Bible is the inerrant Word of God. The discovery of the Dead Sea Scrolls revealed the existence of other gospels, some with a Gnostic perspective. A common feature of amendments, such as those in St Jerome, is correcting existing texts so as to confirm the orthodoxy of their own views. In addition, the earliest texts of the Gospels date from the fourth century. The author gives many examples of difficulties raised in relation to the apostolic tradition, individual church fathers, church councils and popes contradicting each other.

The chapter on the development of Christianity asks whom Jesus believed himself to be, who actually founded Christianity, the origins of Christian doctrines, ideas and practices, the question of what is and is not orthodox, and the origins of the priesthood. There are sections on Jesus the rabbi, the miracle worker, the prophet, the Messiah, the Royal pretender, the Son of Man, the lunatic, the Lord, the Son of God, the Christian and the God. The notion of a Christ as an anointed one mutates into Jesus Christ as a title. In the early days, there were Nazarenes under Jesus's brother James, Pauline Christians and Gnostic Christians as well as other schismatic sects who all disagreed with each other. Eventually, the Pauline line triumphs. A key and long-running dispute concerned the relationship between Jesus's humanity and divinity, which was also an important topic at successive Councils, where issues were decided on a majority vote. The Trinity has its origins in Egypt, while other religions like Hinduism have their own trinities. There is considerable discussion over Mary, the Virgin Birth, the Atonement, Original Sin and the Resurrection.

The author shows how many Christian ideas and practices had their origins in other traditions, for instance the correlation between vegetation gods and the resurrection; then many originally pagan sacred sites were taken over by Christianity, which also adopted the festivals, such as Christmas. There

is an impressive table on page 195 showing the development of Christian sects in the context of related religions. This means that all present day denominations are in fact branches. The early church had no ecclesiastical power structure, which was a later development leading to a chain of succession as an argument for authority and obedience. In the history of the papacy, there is no biblical reference to Peter as the first Bishop of Rome which, according to Irenaeus, seems to have been Linus (p. 211). Some claims to power were reinforced by forged documents such as *The Donation of Constantine*, actually dating from 754, but post-dated from 315. This ‘purported to confer on the reigning Pope, and his successors, primacy over the patriarchs as well as temporal dominion over the West, along with the Imperial insignia.’ (p. 215) There follows a colourful summary of the history of the papacy with some really shocking details and plenty of nepotism and corruption. For example, Pius II created a nephew, the future Pius III an archbishop and cardinal at the age of 21. Sixtus IV appointed numerous relatives including three sons and six others, as cardinals, one of them the future Julius II (p. 228)

The forensic analysis continues with eight methods of manipulating facts, with numerous examples: suppressing inconvenient evidence, selecting sources and arguments, fabricating records, creating retrospective prophecies, attributing ambiguous authority to the Old Testament, ignoring or distorting New Testament injunctions and examples, inventing, amending and discarding teachings and practices, and manipulating language. This is followed by case studies about the rebranding of a sky God, the virginity of the Virgin Mary (the Hebrew word *almah* used in the Old Testament does not mean ‘virgin’ but ‘nubile young woman’) and the creation of the Nativity story along with a further discussion of textual problems.

Many writings regarded as heretical were destroyed, and their authors persecuted when the Church achieved political power. Prophecies are quoted out of context, and the status of the Old Testament is called into question as it is used selectively by believers, depending on their affiliation. The interpretation of many doctrines, such as hell, has evolved as attitudes have changed and positions become untenable or ‘unteachable because of widespread disbelief.’ (p. 306) Women are now able to play a much more active part in the Anglican Communion, but there is still resistance on grounds of tradition to any change in the Roman Catholic Church. These fundamental changes of direction undermine the claim of perfection and infallibility. A real difficulty arises from the fact that educated theologians and priests ‘generally have beliefs far in advance of their flocks’ (p. 339), who

have a much more simplified and a generally literalistic understanding.

The last two shorter chapters look at the history of science and Christianity, and the prospects for religion in the 21st-century. The author discusses issues arising from cosmology, mathematics and physics, biology, earth science, theology and philosophy, then more recent controversies on evolution and genetics, creation science and the origins of life. The huge historical and cultural power of the Church until the 17th century enabled them to control learning and suppress inconvenient knowledge. Even now, churches enjoy considerable advantages and influence on education. There is still a danger of subordinating rationality to religious dogma, an attitude that led to 'book burning, scientist burning, obscurantism, suppression of evidence, rewriting history, linguistic deceptions, and hostility to scientific advances.' (p. 455)

For those unfamiliar with the field, the devastating detail of the book will be an eye-opener, but I am more optimistic than the author in terms of a sea change in opinion. He rightly says that the early church taught brotherhood, tolerance, peace, love, justice and mercy. However, when it achieved political power, it caused division, persecution, war, hatred and injustice, not to mention child abuse – a side-effect of narrow views on sexuality and the celibacy of priests, only introduced in the 11th century. I think there is a return to the early essence of Christianity and a much more universal outlook, although this is balanced by the prevalence of fundamentalism, both in Christianity and Islam, where, as Voltaire observed in the 18th century, those who believe absurdities will commit atrocities. There is also a considerable trend towards non-sectarian spirituality, many of whom would be sympathetic to the disturbing analysis in this book. It can be recommended to any reader wanting to find out more about the history of Christianity, even though there is a danger of throwing out the baby with the bathwater with the relentless focus on the negative side of religious dogma.

The Journey from Gawd to God and why it matters

John Maxwell Kerr

GOD EXISTS BUT GAWD DOES NOT: FROM EVIL TO NEW ATHEISM TO FINE-TUNING

David Ray Griffin

Process Century Press, Anoka, MN,
331 pp., \$24.00 (US), p/b -
ISBN 978-1-940447-15-5

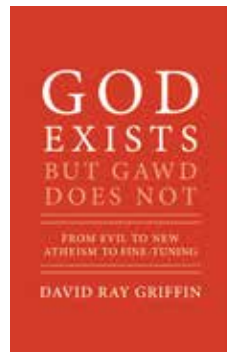
With this most engaging title, David Ray Griffin, Emeritus Professor of Philosophy of Religion and Theology at Claremont, will draw many a reader into his engagement with arguments

for theism and antitheism variously understood. Over all fourteen chapters and the postscript, the tutelary genius of A.N. Whitehead hovers, with Charles Hartshorne, Thomas Nagel, and John Cobb as attendant muses. The well-read reader will not be disappointed by either the extremely wide range of topics covered nor by the quality of their brief treatment by this able scholar. "God Exists but Gawd Does Not" feels like the fruit of a life-time of faith seeking understanding within process theology.

The first six chapters present arguments for the non-existence of "Gawd." The strongly-convincing anti-theistic case rests on the existence of evil, the case for scientific naturalism, evolution, consciousness, miracles, and immoral effects. The arguments are critically presented with a pleasing breadth of reference to Griffin's sources in the 'End-notes' section of each chapter. But who or what is this "Gawd"? For Griffin "Gawd" is the omnipotent deity who, having created the world out of nothing, can unilaterally bring about any state of state of affairs, as long as it is not self-contradictory. Another of Gawd's attributes is: "non-existent." Is the alternative to "Gawd," atheism?

Eight chapters are then devoted to making a cumulative case for the existence of "God," as understood in panentheism. These chapters begin with mathematics' evincing a reality other than that met in sensate empiricism. Frequent reference is here made to both the Platonist and Bencerraf problems' challenge to the naturalistic rejection of any relationship between mathematical forms (as actual entities), and the physical world, and their interaction with mind. Those challenges form much of the case against "Gawd." Kurt Gödel suggested the solution lay in the validity of non-sensory perception (also as in Middle Platonism), saying that he did not know of any reason why we should have "less confidence in this kind of perception, i.e. in mathematical intuition, than in sense perception." The late modern world-view, which argues forcefully against "Gawd," insists that non-sensory perception is impossible *naturally* because the material world we apprehend with our senses is all there is. Griffin points out that this is not a sufficient argument against "God."

Confidence in non-sense-derived experience is carried through Griffin's treatments of the reality of moral perception, logic, and the truths of rationality (non-contradiction, for example), truth itself, and (surprisingly) religious experience, followed by chapters on metaphysical, cosmological, and teleological order.



The eight chapters present again and again Whitehead's dictum "we must take the whole evidence into account," with Hartshorne's "what we have to be guided by in our decision-making, we should not pretend to reject theoretically." Some pages are almost a commentary on Whitehead citing him eight times.

In his Postscript, Griffin answers the big question, "So what? Why does it matter whether we believe in the non-existence of "Gawd," or that "God" exists?"

His very readable 2015 book, "*Unprecedented: Can Civilisation Survive the CO₂ Crisis?*" gives a hint: the "over-riding threat of global warming or climate change" could mean that civilisation will be destroyed. Belief in an omnipotent "Gawd", especially among American Christians of an evangelical persuasion, leads to their complacency about the deleterious effects of human activity on climate or outright denial. "God Exists But Gawd Does Not" was written during the debates prior to the 2016 presidential election – many examples from these debates, and since the election, sadly illustrate Griffin's case.

Finally, Griffin tells us that his book supports what Rupert Sheldrake has called *anatheism*. This means "returning to a belief in God after passing through the purifying fires of atheism." The trajectory of the arguments in "God Exists" takes the reader through the weaknesses of "Gawd Exists", shows the intellectual inadequacy of atheism after the rejection of divine reality, and presents a third alternative. God exists, God as construed within panentheism. Belief in God may yet give an incentive to combat climate change and a hope that our efforts may find success.

I strongly recommend close study of Griffin's book. To appreciate his arguments does require a moderately sophisticated background in philosophical theology, preferably from a process theology perspective. Of course some of the material is far too compressed to be persuasive by itself (and persuasion, beyond mere information, is the object of "God Exists But Gawd Does Not.") The treatment of the physics and metaphysics of some forms of anthropic principle derived from the fine-tuning of constants and of the forces in nature is necessarily rather curtailed. And in a book of this length and complexity to be stopped only once by a grammatical error is remarkable these days. On page 282 of "God Exists but Gawd Does Not", a lapse in proof-reading created an enormity.

Rev John Maxwell Kerr is a Member of the Society of Ordained Scientists.

Self-Formation on an Ascetic Planet

David Lorimer

YOU MUST CHANGE YOUR LIFE

Peter Sloterdijk

Polity, 2013, 503 pp., £17.99, p/b – ISBN 978-0-7456-4922-1

I doubt that many readers will have heard of Peter Sloterdijk (b. 1947), who is professor of philosophy and aesthetics at Karlsruhe's School of Design. He was active in the student movement of the 1960s, and in 1983 published his *Critique of Cynical Reason*, where he analyses the dissolution of the student movement as a 'complex metamorphosis of hope into realism, of revolt into a clever melancholy. He continues: 'Because everything has become problematic, everything is also somehow a matter of indifference. The result is cynicism, defined as 'enlightened false consciousness': 'It has learned its lessons in enlightenment, but it has not, and probably was not able to, put them into practice. With this reference to practice, we come to a central theme of the current book, which is challenging, complex and dense in its analysis.

The title comes from the last line of a poem by Rilke, *Archaic Torso of Apollo*. Despite its incompleteness, the perfection of the statue represents the ethical imperative that we must change our life. Christians will recognise this as the fallen state requiring conversion, transformation or a new birth. Broadly speaking, this requires *askesis*, exercise or training, striving to become better. The brooding presence in the book is that of Friedrich Nietzsche with his representation of human life as a rope with *Übermensch* at one end and the beast at the other. Nietzsche helped to define the plight of modernity after the proclaimed death of God, favouring self-mastery over submission even if discipline is required in both instances. For Sloterdijk, the dichotomy between believers and unbelievers is obsolete and has been replaced by the distinction between the practising and the untrained, and those who train differently. (p. 3)

This distinction raises interesting issues since practice, whether athletic, musical or spiritual, requires commitment and discipline, especially to maintain it in the long term. Discipline can also be contrasted with indulgence encouraged by our consumerist culture and built on the kinds of habit and inertia that we all recognise. At a certain point, we may feel compelled to overcome our inner obstacles in the form of passions, habits and unclear ideas, (p. 195), which, for Nietzsche, metaphorically represents a form of acrobatics designed produce strength

and resilience. This also introduces the image of verticality and the de-verticalisation of our culture. Height psychology is maintained in our discourse of ladders and levels, as well as the traditional idea that heaven is above and hell below. One example of de-verticalisation given by the author is the Olympic philosophy of Pierre de Coubertin where the ascetic practice is primarily physical, although the mental component is also important. Interestingly, he does not mention the Olympic motto of *citius, altius, fortius* (faster, higher, stronger) as an example of self-overcoming, or becoming superior to oneself - the breaking of Olympic records testifies to this. This process of self-formation is similar to biological concept of *autopoiesis*, which is not mentioned in this context. We also live in the time of de-contextualisation, where practices like mindfulness are removed from their original cultural context. However, this makes the point that for us contemporary people, the practice and its pragmatic results are what matters. An interesting example (not given by the author) of self-overcoming since the 19th century is the rise of mountaineering - an obvious image of verticality - where courage, perseverance and discipline are required in equal measure, and humans have consistently climbed new faces; then we have it complement in downhill skiing. The horizontal equivalent would be polar expeditions, if anything even more gruelling.

Human life consists both of self-formation, mainly in the first part of life, and self-transcendence in the second. This corresponds to a process of creation and dissolution, anabolic and catabolic processes, the creation and transcendence of the ego. In this respect, the author gives examples from various spiritual traditions, including the ladder of humility by St Benedict and the exercises of St Ignatius. All these forms of training come under the heading of 'anthropotechnics', requiring individual effort and persistence. The result is often overtaxing, and the imitation of Christ (*theomimesis*) may represent a form of 'authoritative perfection'. In every case, however, there is a self-referential or autoplasmic relationship where we are artistically forming ourselves - 'actions return to affect the actor, works the worker, communications the communicator, thoughts the thinker and feelings the feeler.' (p. 110) It is important to note that this represents a conscious striving for self-improvement rather than a technological or engineering enhancement from the outside. Augustine has a different take when, against Arius, he devalues works and by implication practice in favour of the overwhelming power of grace.



He may have a point in the sense that there is both a time to act and a time to surrender.

Although the author uses the phrase 'work on oneself', he does not delve into the long American tradition of self-improvement, going back to Benjamin Franklin in the 18th century and also manifest in Britain the 19th century with Samuel Smiles. This

was given a new impulse by Andrew Carnegie in persuading Napoleon Hill to undertake a 20-year project, resulting in his *Laws of Success in Sixteen Lessons*, which forms the starting point of subsequent work on self-improvement and success principles developed by Earl Nightingale, which one also finds transpersonal psychology and the work of Ken Wilber. The spiritual impulse in 19th-century also came from Emerson and the New Thought movement with Ralph Waldo Trine, Thomas Troward, Charles Haanel and Walter Russell. All these men were convinced that we co-create our lives from the inside out and can transform ourselves in the process.

The final chapter analyses the human outlook in relation to Rilke's imperative that you must change your life. It was Nietzsche who suggested that humans can only advance as long as they follow the impossible, challenging the pragmatic consensus that one can only demand of people what they seem capable of achieving. In our current predicament, this is manifestly inadequate and we all fall short of who we might become. It is now the spectre of global catastrophe that urges us to change our lives, but most of us continue to prevaricate with business as usual - threatening pronouncements can be seen as a form of entertainment in the documentary horror genre.

As a signpost, the author quotes Hans Jonas' version of the categorical imperative: 'act in such a way that the effects of your actions can be reconciled with the permanence of true human life on earth.' (p. 448) The trouble is that we are in a long emergency, 'heading for a crash whose time is uncertain, but which cannot be delayed indefinitely' - we can see a parallel uncertainty in the timing of our own deaths. However, our short-term imperatives trump these concerns and we spend our time 'preserving jobs on the Titanic.' This does leave the reader asking for further guidance on the kinds of practice the author thinks are required beyond his generality of 'taking on the good habits of shared survival in daily exercises.' He is stronger on diagnosis than practical applications, even with his overall emphasis on the importance of practice - perhaps this will be the subject of a further volume.

Evolution and Soul Formation

David Lorimer

SOUL STORY

Tim Freke

Watkins, 2017, 322 pp., £12.99, p/b – ISBN 978-1-78028-964-7

While checking the publication details of Tim's hugely significant new book, I find that I am writing this review on its exact publication date - a nice synchronicity. His starting point is what he calls a soul crisis brought about by the demise of outdated religious ideas and the rise of a hard-headed science 'which has left us adrift in a meaningless universe.' Hence his proposal for evolutionary and emergent spirituality that creates a genuinely fresh understanding of life by reconciling scientific knowledge with spiritual wisdom - going beyond both religious and scientific dogmatism. In order to articulate this, he invents a number of new terms, of which more anon, but also sets the book out in an unconventional minimalist format without punctuation and capital letters in the interest of conciseness. He provides a useful glossary defining his new terms at the end.

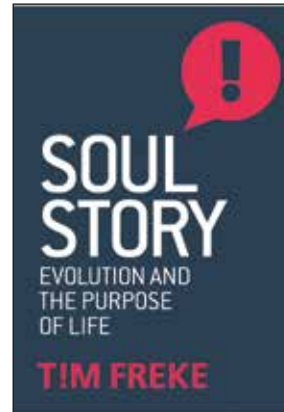
The overall evolutionary narrative in the 'timestream' can be seen as 'the journey [of self-realisation] from unconscious oneness through conscious individuality to conscious oneness' (p. 142), a similar structure to the thinking of Owen Barfield with his original participation, individuation and final participation - as an overall narrative, this makes a great deal of sense to me. From timestreams emerge lifestreams with individual somastreams and finally soulstreams. Each new level transcends and includes the previous one, but they exist alongside each other. Time is understood not so much as passing as accumulating, building ourselves up as we go. If the future is open, however, the past, like inertia and gravity, exerts a backwards or downwards pull - as we can all experience. He calls this 'pastivity'. At the same time as individuation, we have a corresponding process of what Tim calls 'univivuation' combining to form a greater timestream on a more emergent level of evolution.

Within this picture, body and soul are seen as emergently related, the former associated with sensation and the latter with imagination. Beyond is the spirit as formless presence witnessing both. We are at the same time individuals and one in spirit, moving towards self-realisation and the expression of love and wisdom. Awakening is spirit becoming conscious of itself as spirit, what Thomas Troward calls the great realisation of the relationship between individual and universal. A key insight is the evolution itself has evolved. Tim sees chance predominating in the early

stages of evolution, and a gradual emergence of choice and consciousness with complexification. These levels of emergence exist alongside each other and we are shaped not only by physical causality and biological necessity, but also by what he calls magical narrativity and divine transivity - these last two terms refer to the way in which conceptual narratives shape the way our lives unfold, and how the power of transcendent spirit shapes our life stories in benign ways.

Tim's understanding of immortality and God is that these have also evolved with our imaginative capacities. He cites earlier pictures of the afterlife and how these have gradually been refined; a corresponding process applies to our understanding of God, as Sir James Frazer and Grant Allen were pointing out at the end of the 19th century, even if the direction of their thought was towards atheism. While the lifestream is necessarily temporary, the soulstream is postulated as permanent - the word itself means lasting through. Hence his picture of reincarnation and the 'imaginos' of the afterlife as a shared collective dream or dreams. If death enables us to remember who we are, then incarnation is postulated as a forgetting or fall/descent, as in Neoplatonism and Gnosticism. As the NDE suggests, death provides us with an opportunity for a deeper review and evaluation of our lives within an evolutionary context. While in incarnation, we have to work with the body and its genetic heritage as well as our cultural situation.

We also know from NDEs and mystical experience more generally that people become what Tim calls love-light and that this is an intensely real experience of communion, which experiencers try to apply when they return, in other words bringing heaven to earth. This picture means that even what we understand as transcendent is in fact emergent, which has made me rethink my previous understanding of the relationship between transcendence and immanence (Whitehead's *Process and Reality* is a key text with this his ideas of the primordial and consequent natures of the Divine). Traditionally, transcendence is primordial, existence is a manifestation and unfolds a gradual process of immanently coming to realise the divine within. This view, however, gives rise to the classic problem of evil or theodicy where an all-powerful and all-knowing God seemingly permits evil and suffering. Like some Gnostics, Tim postulates that the divine is essentially goodness but is not all-powerful, guiding rather than coercing, but doing its best in the circumstances.



An encouraging thought is that our outrage at terrorist barbarities is an indication of evolutionary advance as such things were taken for granted hundreds of years ago. In that sense, such acts represent a regression that will gradually be replaced.

This brings Tim to a consideration of the complementary importance of love and wisdom, which he hyphenates into love-wisdom. This helps us live with paradox and balance individual needs with universal oneness, autonomy with connectedness, as we become more conscious more often. He proposes a new discipline of 'soulology' to assist with the process of social transmutation and spiritual awakening. Summarising the overall process, Tim suggests that 'individually and collectively we are evolving from ignorance to wisdom, from biological need to universal empathy, from egoism and tribalism to compassionate communion.' (p. 170) I find this an inspiring vision in which we can all play our part by expressing our individual genius in fulfilling ourselves and contributing to the good of the whole. He urges us to take the risk of really living our lives, deciding to make the most of being the person we are right now, remembering that 'life is good, death is safe, and what really matters is love.' (p. 108) This is a book of true philosophy - meaning the love of wisdom - and deserves the widest possible readership.

A Tantric Initiation

David Lorimer

IN THE DARK AND STILL MOVING

Anne Geraghty (SMN) –

www.annegeraghty.org

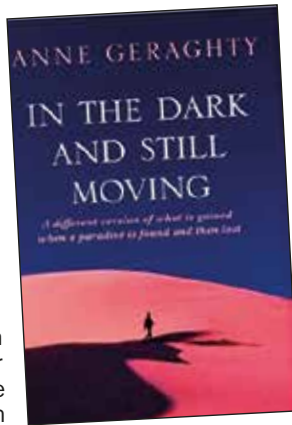
The Tenth Bull, 2007, 302 pp., £10.95, p/b – ISBN 978-0-9554954-0-3

I reviewed Anne Geraghty's more recent book about the death of her son, Tim – *Death – the last God* – last year, then she spoke at our November conference on conscious ageing and subsequently sent me a copy of her earlier autobiographical book. It is an extraordinary and eloquent account of a passionate life that takes readers of my generation right back to the 60s with the rise of radical spirituality and politics, feminism, drugs and sexual liberation. Anne lives all this with passionate intensity and to a degree that few would dare. She refers to this as an energy release from the prison of rigid bourgeois culture.

The story begins with her Catholic upbringing and the gradually escalating tension between her ambition for sainthood and her quest for freedom. The latter wins out, and provides her first initiation into dark turbulence as she seeks to reconcile these opposites. She even buys a wig as an alter ego, and relates that she would go to confession on Saturday afternoon then a wild party on Saturday evening (she is also sexually approached by the priest, introducing another element of darkness). She relates a fascinating encounter with Donald Winnicott that gives her an insight into vulnerability and the potential healing of suffering through redemptive love, and this theme of vulnerability recurs several times in the narrative as Anne seeks to reconcile her roles as feminist, spiritual seeker, mother, lover and activist.

The second part relates her spiritual adventure in connection with the crazy Tantric wisdom of Osho Rajneesh and is entitled *Playing Snakes and Buddhas*. This is a story of both heaven and hell, freedom and repression, wild abandon and submission. Anne becomes Vismaya and takes on responsibility for the British centre after a trip to India. She has to face her own demons, realising that fear just gives them more power and that one must enter fully into life with its ecstasy and agony in order to distil wisdom from life experience. She writes that she 'saw the genuine love that breaks your own heart because its roots are in the real mud of our human struggle with hate. I saw the fierce honesty of a compassion that emerges from passionate anger, rather than the sugar on the shit of piety.' (p. 122) No holds barred here, or indeed anywhere else in this candid account.

Later, she writes that 'wherever there is life, there is everything - power in service and the abuse of power, sexual love and sexual abuse, the light of awareness and the darkness of ignorance.' (p. 132). This all becomes only too apparent in the psychodynamics of the Osho organisation. Many who occupied senior positions are later viciously stripped down to nothing, shamed and humiliated, their motivation questioned in the name of deconstructing the ego, which of course is meant to be good for them. I was quite taken aback by the unconscious projection of the shadow by those who had taken over - many of whom were later humiliated themselves (hence the implicit reference to snakes and ladders). Anne is told that she has the negativity of lifetimes to deal with, that she is deceitful, manipulative and cowardly; then, with supreme irony,



about his experience, and as a family they undertake an intense process of exploration and healing. Her intimate relationship at the time when she was in the community is subjected to enormous strain, even though it later survives and thrives. One point, she literally loses everything as her house is burgled by people pretending to be furniture removers! Indeed, the third part is entitled 'falling in all directions' as she goes deeper into the realisation of the redemptive role of suffering and enters into further despair. It looks like her long-term relationship is doomed as her lover abandons her for another woman - she alternates between rage and grief as she processes the perverse results of her efforts to create a better world, but her vulnerable heart opens further and her lover returns. The mystery of the human heart is that 'its capacity for love and its capacity for suffering are the same.' (p. 277)

The final chapters bring things together, the brightness of the light corresponding to the darkness of the shadow. Osho dies, and appears to her the next night. She reflects that she did her best to make love not war, but found that all love leads to some kind of war until a different love arrives. She realises that she has to live with her own darkness, or else someone else will have to suffer it for her and she will project it out onto others. This leads to the profound realisation that 'darkness is intrinsic to our dualistic existence where life is divided into 'good' and 'evil' and 'you' are not 'me', 'we' are not 'them'. I learned by falling, repeatedly into my own darkness.' (p. 293) However, 'our human darkness, in all its anguish and despair, is the inextricable soul mate of the love, freedom, truth, friendship and beauty I have also found.' (p. 294). As readers of her other book will know, the loss of her son Tim gave her a further intense initiation even beyond all the joy and suffering expressed in this book. At a time when the shadow is cast worldwide for us all to see, this book can help us realise that light can come out of our own darkness if we embrace it rather than project it onto others.

she is informed that she is 'completely unconscious of the true motivations of your vicious and vindictive mind.' This leads to a punishment in a 'correction facility' in Germany involving 14 hours a day of manual work as a way of crushing the spirit.

A Cosmic Messenger

David Lorimer

A WORTHY MESSENGER

Charles W. Hardy

Cosmic Books, 2013, 361 pp., no price given, p/b - ISBN 978-0-615-88732-6

THE MESSAGE OF THE DIVINE ILIAD

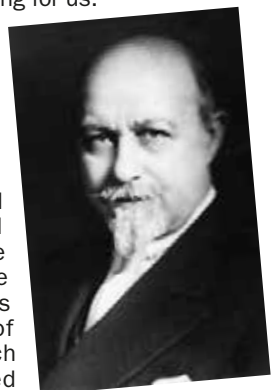
Walter Russell

University of Science and Philosophy, 1999, 130 pp., \$25, h/b - ISBN 1-879605-59-9

I have referred to the work of Walter Russell (1871-1963) quite a few times recently in various conference presentations, and I usually find that the only people who have heard of him are those who have attended a previous presentation! I also reviewed the short biography by Glenn Clark (*The Man Who Tapped the Secrets of the Universe*) and Russell's own *The Secret of Light* in a previous issue. I would still recommend those unfamiliar with his work to begin with the Clark biography which is only some 60 pages - the pdf can be sourced on the Internet. The New York Herald Tribune called Russell the modern Leonardo for the variety of his accomplishments, which are described in this readable biography by Charles Hardy, who knew Russell as a young man.

Starting as a musician, Russell became one of the foremost portrait painters of children, including those of President Theodore Roosevelt, as well as a prolific illustrator. At the age of 56, he moved on to sculpture, which he had never done before, and his first subject was none other than Thomas Edison. He is perhaps most famous for his Mark Twain Memorial and the Four Freedoms, which include President Franklin Roosevelt's freedom from fear: 'there is nothing to fear but fear itself.' In the meantime, he was also an architect, town planner and the originator of the cooperative housing concept. Then he was a leading horse breeder and champion figure skater, even into his 60s. He famously said that genius is self-bestowed, and mediocrity self-inflicted. His life is an extraordinary demonstration of human capacity and possibilities when connected to the Source. This means working with God, rather than God working for us.

The central incident of Russell's life was a three-week mystical illumination in 1921 where he became aligned with the Light and Love of the Universal Mind and was able to download some extraordinary insights into the nature of the universe, which he first expressed



in the mystical Divine Iliad and more scientifically and philosophically in *The Universal One*. Here he is able to articulate some of the basic dynamic principles of the universe, including the complementary principles of unfolding and refolding, radiation and gravitation, birth and death, all in what he called a rhythmic balanced interchange. I am still in the middle of this masterwork, which he subsequently updated in other publications, but which was the source of his doctorate conferred by the New York Academy of Sciences in the 1941. It should be noted that Russell left school at 10, and never received any formal scientific education. Nevertheless, he was able to conduct high-level debates with scientists on these topics.

In the 1890s, he became involved with Andrew Carnegie and others in the Twilight Club and the Poet's Code of Ethics, which sets out a number of basic ethical principles as the foundation of what we would now call a global ethic. In its original form, the Twilight Club was instrumental in bringing into existence movements such as the Boy Scouts, Rotary Clubs, and Better Business Bureaus, which was a joint venture with Thomas J Watson Sr of IBM. Russell gave many motivational talks at IBM, which were very well received. He also continued the work of the Twilight club through the Society of Arts and Sciences. Carnegie also sponsored the Authors Club, which brought together many leading literary individuals and was an important element in Carnegie's own education.

The Message of the Divine Iliad gives the mystical essence of Russell's vision as a scribe for the Universal Mind. It is written in verses and with old-fashioned use of thee and thy and directly inspired from the I Am presence. There are nine sections, including a salutation to the day and invocation for the night as well as chapters on desire, rest, love, beauty and healing. Desires are seen as patterned seeds that repeat themselves and give rise to corresponding situations and conditions. The divine is the centring presence within all manifestation and thinks or creates within us. The key shift is the realisation that 'the Self of man is Me' (p. 67). The Divine is the universal I, and humans are 'One in Me when they know Me in them.' Knowledge and power are not only in the Light, but also in Love as well as in Beauty. This is a form of knowing beyond sensing and the separation of bodily awareness. We cannot think beyond our knowing, and the ultimate knowing is cosmic knowing in which all is unified. We are therefore encouraged to know that we are wholly Mind and that our minds and the divine one Mind.

It is interesting to reflect that Walter Russell (1871-1963) and Bertrand Russell (1872-1970) were almost exact contemporaries with very

different viewpoints. Walter would have considered Bertrand as sense bound in his knowing, while Bertrand would have regarded Walter as going beyond the bounds of reason. However, they both lived in the same world while operating at very different levels but sharing a concern for the welfare of the world as a whole, as their common preoccupation with nuclear weapons in the 1950s shows.

Seeking the Essence of "Spiritual but not Religious"

Oliver Robinson

BELIEF WITHOUT BORDERS: Inside the Minds of the Spiritual but not Religious

Linda A. Mercadante

Oxford University Press USA, 352 pp., £19.99, ISBN 978-0199931002

There is a demographic revolution going on in the Western world. Several decades back, the label of 'spiritual but not religious' (SBNR) did not exist. Now surveys suggest that up to a quarter of the population endorse that option. Linda Mercadante, a professor of theology, has done a major study in the US to find out more about this group and what they believe. This research is presented and summarised in accessible form in *Belief without Borders: Inside the Minds of the Spiritual but not Religious*.

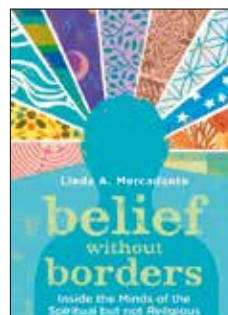
The book is set up in a subtle way that makes the distinction between spirituality and religion both relevant and problematic. It is problematic in that it is often over-simplified as "religion = dogma and convention" and "spirituality = experience and individualism", and this problem is compounded by the fact that SBNR individuals tend to over-simplify in this way. In fact, the distinction is far messier than that. Religion contains liberal, critical and highly individualised forms of belief and worship as well as more exclusivist and dogmatic forms, while spirituality contains varied formulations, some of which have a form of dogmatism and exclusivism of their own in being cocksure of their superiority. I appreciated Mercadante's approach to this breaking this distinction down – it was considerably more nuanced than I have found in most other books on the subject.

Mercadante categorises her SBNR interviewees into five types. *Dissenters* intentionally stay away from institutional religion and are critical of it. They tend to reject particular theological positions, and select a personal worldview that is intentionally contrary to the religion that they grew

up with. *Casuals* are not so bothered. Spirituality is neither something that captures their attention nor organises their life. They dip in 'as needed'. Spiritual practices are for them primarily a way toward better health, stress relief and emotional support. *Explorers* show a fascination with all things spiritual. They tend to try one thing out and then another, seeking novelty and new experiences. They have no plans to settle anywhere, enjoying the journey without any hope of a destination. *Seekers* are much like explorers, but the difference is that they are looking for a spiritual home. *Immigrants* are those who have moved to a new spiritual land and trying to adjust to new identity and community, while still identifying as SBNR. Mercadante found this group struggling with the constancies of religious life, and suggests that something about the independence and freedom of the SBNR designation may make the commitment and group loyalty of a religious community difficult.

In the context of a very hazy division between spirituality and religion, what *does* define being SBNR? Despite the prize attached to being individual and unconventional in the SBNR world, the interviewees in the study showed a clear and common heritage in their beliefs. They were, however, often unaware of this heritage, thinking that their own ideas were new and even unique. In fact, they were drawing on ideas and language from Swedenborgianism, Transcendentalism, Romanticism, spiritualism, esotericism, Theosophy, New Thought and Asian religions. They also were drawing on the Protestant lineage of individual interpretation and allowance of criticism to be part of faith.

In her analysis of the key themes in belief, she picks out as particularly common in the SBNR ethos. Firstly, spirituality is based on a hero myth structure of overcoming the ego through a quest of self-improvement, which requires undertaking a host of therapeutic, artistic and spiritual practices. Secondly, exclusivism – the idea that one idea has the truth – is rejected in favour of a "perennialist" approach that sees all spiritual concepts as relative, but the mystical experience as absolute and truth-giving. Experience in this belief set is the ultimate touchstone, so interpretations and concepts should follow it. Thirdly, the choice to be SBNR is based on perceived ethical shortcomings in religious groups, including prejudice, homophobia and fear of the other. Finally, there is the belief in the validity of syncretism – the bringing together of diverse ideas and practices and integrating them in an individual and improvised personal system. The postmodern values of uncertainty, fluidity, subjectivity



and relativism are all richly espoused in SBNR, but typically within a worldview that places spirituality as a higher expression of the sacred than religion. It seems that Mercadante is, as a Christian, slightly irritated by the superiority that she sees hiding behind SNBR's espoused pluralism, and one can understand why.

Overall, the book has a strong balance of description, evaluation and criticism and is, as yet, one of only a few major empirical studies on the SBNR revolution.

Mercadante does a good job of arguing for and against the worth of the SBNR label. On one side, it could be as a narcissistic descent into spiritual navel-gazing, while on the other, it could be a healthy flood of spiritual passion out of religious institutions into the world at large. In Linda Mercadante's view (and mine too) it's probably both.

Olly Robinson is Senior Lecturer at the University of Greenwich and author of *Paths Between Head and Heart: The Seven Harmonies of Science and Spirituality*, to be published in 2017 by O Books.

psychology- consciousness studies

Law and Freedom

Peter Fenwick

LIVING ZEN REMINDFULLY – Retraining Subconscious Awareness

James Austin (SMN)

MIT Press, 2016, 308 pp., £24.95, p / b
- ISBN 9780262035088

Living Zen Remindfully begins with this quotation, by Jonathan Livingstone Seagull:

"The only true law is that which leads to freedom. There is no other."

This book is remarkable because every word in it is directed towards an understanding of Zen freedom. As you read, you become aware that James Austin is no longer a neurologist struggling with the problems of neurology, but has become a true Zen Master, showing a depth of understanding which only comes through the freedom of Zen.

He begins by asking whether meditation can enhance creative problem solving skills. Not surprisingly, meditation greatly enhances creativity, and the data show that divergent styles of creative performance draw on certain parts of both hemispheres, with the highly creative group showing greater connectivity. James goes on to discuss the two games practised widely in Japan, GO and Shogi. A paper from the Riken

Brain Sciences Institute (where I worked for a number of years) shows that the caudate nucleus, the major motor nucleus, was involved in intuition and planning.

So is it possible that the completely thought-free intervals that arise in long-term meditation practitioners could be a major factor in increasing the potential for creativity? James reviews the data, but concludes that more research is needed. We shall just have to wait and see.

He goes on to ask another fundamental question. What does it mean to be enlightened? He initially answers this with a quotation from Koun Yamada-Roshi, *"Enlightenment means to directly see the essential world through one's experience. To bring the enlightened eye to complete clarity requires a long period of continued practice."* James goes on to look at the factors which may facilitate awakening, including the fact that it is frequently precipitated by an auditory stimulus. To achieve enlightenment the path of Zen must be followed, and this Yamada-Roshi defines as "the perfection of character." The guidelines for this practice come from the living Buddhist philosophy, generosity of spirit in all matters, disciplined restraint of the passions, patience and tolerance, resolutely applied energy, meditative practices that dissolve the intrusive site, the ripening of authentic insight wisdom. But as James points out, awakening is not a final destination. Enlightenment is a work in progress.

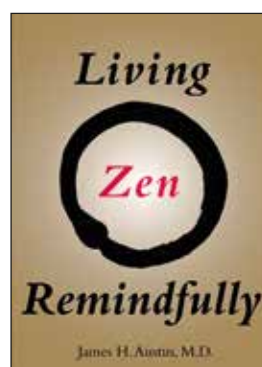
After reminding us about the Self/Other concept, he brings us up to date with a study on long-term Vipassana meditators, showing that a diminution in the self is accompanied by reductions in beta and gamma frequencies. Thus less self means less gamma in the left hemisphere, those networks which underpin self-verbalisation, i.e. talking to oneself. He points out that disturbances of ventral (temporal) information processing – concerning detailed object representation – lead to allocentric (other) impairment, while disorders of the fronto-parietal processing stream, dealing with spatial information, cause egocentric deficit. These concepts are now well advanced and evidence suggests that millisecond decisions are made on spatial allocation within the brain.

Remindfulness, the title of the book, lies at its core. James defines it as the quality of recollecting the most appropriate thing at the right time, starting with the simple example of following the breath. Soon, the mind wanderer defines it as the quality of recollecting the most appropriate thing at the right moment and then,

from short-term memory, into the mind unbidden comes the fact that you should be following the breath, and you return to this. He also mentions the important example of Prince Siddhartha who, while a child, experienced blissful states of consciousness while meditating under a tree. He left the palace and wandered for many years on his spiritual quest. One day, when he felt he could not go on, this distant memory came into his mind. Note – it retrieved itself. For this crucial recollection led him to seek out a tree under which he could meditate. This tree, as we know, was the Bodhi tree, and after struggling for some time, conquering his demons, just before dawn he gained selfless insight to the full glory of the universe.

This quality of remindfulness, James reminds us, is extremely important, particularly when intuitive thinking is required. Intuitive thinking has been termed 'the unconscious thought effect' (UTE) and, is correlated with an enhanced memory, and more importantly, with the *gist* (the overall flavour) of the relevant attributes of a decision making process. He describes the neuroanatomy underpinning this effect and goes on to look at remindfulness in action. He notes its more frequent occurrence with intensive Zen meditation practice and describes one such episode from his own experience. A single soft note, one ring of the familiar doorbell which came unbidden into his consciousness, so persuasive that he got up to answer the door and found no one there. These single note rings were all recurrent auditory hallucinations, lateralised in physical space, off to his left. One morning in May, 2015, after he had been increasing his meditation and while still in a phase of light sleep, he heard a soft single resonant note, which turned into a phrase of syncopated music. He goes on to say that this when this phrase changed he asked himself why? No extra zen sitting had been carried out. He then remembered that the day before he had been walking for an hour in a wood of tall trees, and this was clearly what had triggered the inspiration. He quotes Master Yongmige then said "He then quotes Yanshou who said *"Mountains and rivers, earth and grasses, trees and forests are always emanating their subtle and precious sound....It is right in front of our faces. Every one has this inconceivable capacity for great liberation."*

Realising the significance of an ordinary stimulus such as sound led James to understand what happened that day when, standing on the London Transport Platform, the state of kensho descended on him. He describes the case of a 52-year-old man who, when he was 28, whilst in



meditation, heard the sound of a jet plane moving overhead, and this was followed by a dramatic experience of seeing light. It was his attention to this auditory stimulus which triggered his experience of the light; an auditory cue activating his 'what and where' allocentric pathway.

Regarding his own experience of the dawning of his kensho, James notes that he was standing there on that unfamiliar platform watching the train move away and become smaller and smaller till it disappeared. He heard the diminuendo of its clattering along the track which faded into the distance. Then, turning casually 45° to the right, he looked up to see way up there a bit of open blue sky. This was sufficient to lead to the onset of kensho. Interestingly, Zen masters have long recognised that when you stand, there is an absence of 'self' thoughts. Turning to the right preferentially activates the right hemisphere and particularly the right hippocampus. There is thus a clear relationship between body movement and the sense of self, and in his case Kensho.

He analyses the signals that would have passed through his brain, the stimulus of the hippocampus leading to the alteration in his allocentric processing brain module realising that it was a very specific set of actions that triggered this dawning of expanded consciousness changing him forever. Thus James the Zen master who experienced Kensho merges with James the neurologist whose understanding and description of the neurological processes suggests a mechanism that released kensho.

The last part of the book is related to Basho, the Haiku poet. Here is James the Zen master, the intuitive poet, who now walks the stage of wider consciousness. He starts this section with a quote by Blyth "What makes Basho one of the greatest poets of the world is that he lived in the poetry he wrote and wrote the poetry he lived." This is a marker of James' own progress. James continues the idea illustrated by Basho's poetry and the significance of the auditory stimulus in triggering Zen states.

*"An old pond,
A frog jumps in,
The sound of the water"*

Did a sound stimulus, James asks, trigger, the state of awakening in Basho? He goes on to quote a number of sources.

*The old pond, Ah!
A frog jumps in:
The waters sound!*

In another translation:
*Old pond,
A frog jumps in,
The sound of water.*

In this wonderful chapter full of insight into the writing of Japanese poetry James, with his extensive understanding of Zen, brings the practice of Zen and the art of poetry together, illustrating the relationship between the development of Zen consciousness and the outflowing of rich and illuminating poetry. The Zen poet Ryokan in his final poem reminded us of the importance of the natural world. He says, "My legacy, what will it be? And he answers "The flowers of spring time, the cuckoo in the summer, the scarlet leaves of fall."

James in closing reminds us that: *"Living Zen also enters subliminally through open eyes and ears into an open-hearted processing of whatever arises in this present moment. We bow in gratitude, remindful of the countless gifts that all other beings contribute to our living."*

Will James write another book? He is 91, goes for a cardiac work-out three times a week, plays tennis, and keeps himself alive and alert. For someone like James, anything is possible. Has he said all that there is to be said regarding a scientific explanation of the practice of Zen and the brain's functional changes which go with silent Zen sitting and which may trigger and lead to wider states of consciousness? I have thought this before, and I have been wrong. Perhaps I will be right this time when I say that I expect James' next book will be just the flourish of the calligraphy pen as he rests in the immediacy of Zen.

Dr Peter Fenwick is President of the Network.

Dealing with the Dark Side

Serge Beddington-Behrens

ILLUMINATING THE SHADOW

David Furlong (SMN)

Atlanta Press, 2016, 324 pp., £14.98, p/b – ISBN 978-0-955979-569

Our world is becoming increasingly transparent, as the emergence of a higher consciousness is ever conspiring to light up our dark sides with the result that our personal, family, social, political, economic, national and human collective shadows continue to arise ever more forcefully around us, so David Furlong's book could not be more timely. It could also not be more revealing, as too many of us talk far too blithely about the Shadow or the 'dark side' without being fully aware of what it really is and how important it is at this time that we understand it and know how to work with it so we can stop projecting it outside of ourselves all the time.

Jung, who coined the term the 'Shadow', stressed that the way to become enlightened was not to sit on the mountain top in the sun but to have the courage to go down and confront our shadow sides, would be rising from his grave in joy at this book. Why? Because not only is it extremely well-written and does much to deepen our understanding of the term - placing as much emphasis on our repressed positive, light or 'spiritual' shadow and on the cosmic shadow - but it takes what Jung said to the next level. For me, it is everything about the shadow that one wants to know about but didn't know how to ask. While being very scholarly and dealing with dark and difficult issues, it is in no way ponderous, which is quite an achievement.

'We see things,' David tells us, 'not as they are but as we are' and we need both to stop demonising others (projecting our own shadow upon them) as well as rejecting polarities, as our shadow is as much carried by those who inspire us as by those we detest. (No doubt if he were writing today, he might have a lot to say about the significance of Donald Trump and what his presence tells us about the state of America, and who today, has overtaken Jimmy Saville and Tony Blair as the one we most love to hate!)

We learn a great deal about the shadow, David tells us, from the movies. Darth Vader is the 'dark side' of the Force and the films are centred around themes of working through hatred, greed, deception and fear. In 'Return of the Jedi', Luke confronts his father and the Dark Lord who tempts him to give in to his hatred and anger. David shows us how similar shadow issues are present in the films on Superman and Spiderman and in particular in Pirates of the Caribbean. In ET, we glimpse the spiritual shadow where Elliot loves the unattractive-looking ET who is the magical ingredient allowing him to recover, showing us that 'when we love the ugly parts of ourselves, they release their powers to us.' The gift of the positive shadow is that, if owned, it asks us to be much more than the little self that we think we are. In Avatar, we see how shadow issues around greed and fear on the part of the mining company who want to exploit the beautiful planet for its precious minerals, create their own comeuppance. In Schindler's List, we see how Schindler, the rescuer of so many Jews, transformed his life through his relationship with his 'other half' - the evil Amon Goeth!

We learn that literature is also full of shadow themes. Harry Potter is challenged all the time by his shadow side, Voldemort, and is able to overcome him by learning to grow in his humanity and courage. Of course



Dr Jekyll and Mr Hyde is the archetypal 'shadow book' and we are shown that when we reject our dark side, it ends up destroying us. The point is that we all have our dark sides, or as David reminds us, quoting from the Rime of the Ancient Mariner, we all have albatrosses around our necks. Shadow themes also show up in mythology with Seth in Ancient Egypt, Lucifer the 'fallen angel' in Christianity and Loki in Teutonic mythology. Mara, like Satan with Christ, does everything in his power to deflect the Buddha from his mission on Earth because he knows that the Buddha's teachings can potentially remove evil from the world. As such, he is the Buddha's shadow.

David is very good when he helps us identify our own shadow sides and gives us many useful exercises to work with it, reminding us that all criticisms of others and all self-criticisms are shadow issues. I found it a bit alarming when he reminded us that people who say they are hopeless at something, say maths, always have a disowned mathematician inside them, as I like to say this about myself with regard to learning foreign languages. It made me realise that if I am to be honest, I need to shift gears and simply own a side of me that is plain lazy in this arena, yet in doing so, not be hard on myself! I think David is so 'right on' when he tells us that 'whatever politicians say, we know they'll do the opposite', as this happened when, a few months ago, Gove said "I unequivocally support my friend Boris Johnson to be the next prime minister", only, a couple of days later, utterly to denounce him as being completely unfit for the job! In this context, I think of Trump's assertion about 'America being in a terrible state' which only he can fix!

There is so much that is absolutely fascinating about this book. We learn how to identify our archetypes and sub-personalities and recognise our traumatised parts and how to work with them. He is very good talking about the shadow around families and in fairy tales (an excellent analysis of Beauty and the Beast) and draws on the Tarot and the I Ching to reinforce his arguments. I learned to see the various conflicts in the Ukraine, Bosnia, Kosovo, Serbia and the continuous struggle between Israel and Palestine through entirely new eyes. David, you have great political insight and I think you'd make an excellent diplomat. Why not give it a go? Don't 'deny' those impulses for a potential career change!

If I have any small criticism, it is that sometimes he describes things in too much detail, which, while always fascinating, can take one away from the actual theme of the Shadow. For example, while I found what he said about Richard Dawkins and whether God exists or not, very interesting just as I did his discussions about life after death, I was also wondering what their connection was to the main theme of

the book. I also have one or two small disagreements. For example, to me not all dark material is necessarily shadow material and not all evil is necessarily shadow. Some evil is very conscious, that is, it exists very much 'in the light of a person's knowing'. Thus, there is nothing 'shadowy' and everything intentional about Russia dropping bunk busting and flame hurling bombs to assist Assad to kill all off all resistance in Aleppo, just as there was nothing unconscious about Hitler's determination to kill off all the Jews in gas ovens. I would also have been interested in what David would have had to say about the Dark Web, the hidden side of the Internet.

But these points are small in comparison to the overall excellence of a multi-levelled book that needs to be read by politicians, peace activists and economists as well as by psychotherapists and spiritual educators. Its 'self help' dimension constituting various exercises we can do with ourselves to help us integrate our dark sides, I repeat once more, is very well thought out. I finished reading this book full of awe at its magnitude and with a whole new understanding of how deeply shadow issues permeate themselves into all areas of our lives. This is a must for all our bookshelves.

Towards Spiritual Simplicity

David Lorimer

SURVIVAL OF DEATH

Paul Beard (ex-SMN)

White Crow Books, 2015 (1966), 177 pp., £10.99, p/b – ISBN 978-1-910121-94-8

LIVING ON

Paul Beard (ex-SMN)

White Crow Books, 2015 (1980), 202 pp., £10.99, p/b – ISBN 978-1-910121-80-1

HIDDEN MAN

Paul Beard (ex-SMN)

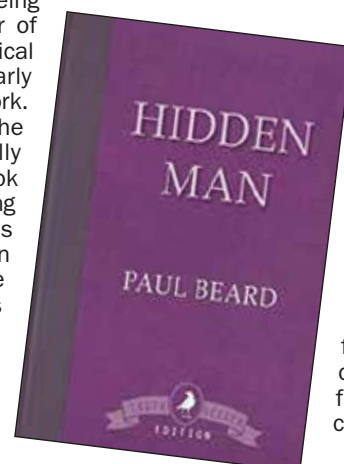
White Crow Books, 2015 (1986), 139 pp., £9.99, p/b – ISBN 978-1-910121-76-4

Paul Beard (1907-2002) was President of the College of Psychic Studies for 16 years, as well as being a prominent member of the Society of Psychical Research and an early member of the Network. I met him during the 1980s, and carefully studied his first book while I was researching my own. There was a close connection between the College with SMN Founders George Blaker and Peter Leggett, and I believe the latter was also a College council

member at one point. The College itself was founded by the Anglican priest and medium Rev William Stainton Moses in 1884, and still maintains its interest at the intersection between the psychical and the spiritual, and the way that interest in the first often leads to the pursuit of the second. These three books are effectively a trilogy, the first looking at the arguments for and against survival, the second an interpretation of how consciousness continues in different phases after death, and the third a book of practical spiritual advice based on guidance received by Paul and on his own insights. The tone reminded me strongly of Peter Leggett, whose books I re-reviewed two issues ago – Peter was an ardent spiritual seeker who also tried to understand and apply the guidance he received. All three books exhibit scrupulous fair-mindedness and I found it rewarding to reread them after many years - they have certainly stood the test of time.

Paul's book on survival was reviewed by the Telegraph, which commented that it was 'an unusually fair and thorough examination of the complexity of psychic phenomena', and it was also endorsed by Ian Stevenson as a valuable contribution. It looks evidence from psychical research and from afterlife communications, while not shirking any of the difficulties and challenges that these approaches raise (see, for instance, p. 43). For instance, highly intelligent and qualified people reach different conclusions on the basis of the same evidence, although many more come down on the side of survival than not. So the evidence is not totally conclusive, and always open to different interpretations, although again these largely depend on the presuppositions of the investigator. For instance, Sir Oliver Lodge became convinced of survival, but the equally distinguished Professor Charles Richet could not bring himself to accept it, largely because of his detailed understanding of physiology, for which he had been awarded a Nobel Prize. Paul quotes Eleanor Sidgwick, the husband of Professor Henry Sidgwick, the first President of the SPR, as saying that conclusive proof of survival is notoriously difficult to obtain, 'but the evidence may be such as to produce belief, even though it falls short of conclusive proof.'

I think this a very fair assessment. The personal search via mediumistic communications is a different approach, but yields a good deal of data, and in this respect Paul was as well-informed as anyone in the history of the field. The difficulties of communication itself are fascinatingly illustrated in a communication ostensibly from Sir William Barrett. He comments that he cannot



come with his whole self and brings only a small portion of his consciousness. Apparently, Sir Arthur Conan Doyle had a similar experience and gave wise guidance to people who would like to communicate with their loved ones. Towards the end of this volume, Paul refers to the work of guides and opening up to inner knowing.

This brings me to the second book as seekers begin to realise that part of them is indestructible – this conviction supervenes on previous reading. *Living On* is concerned with how consciousness continues and evolves after death. Again, the book is based on very wide reading of classic sources including Oliver Lodge, Mrs Willett and FWH Myers, all in pre- and post-mortem states. The evidence from Myers through Geraldine Cummins is perhaps the most extensive in the books *The Road to Immortality* and *Beyond Human Personality*. While certainty is not attainable, a high degree of probability is. Paul discusses problems of assessment and acceptance, as well as the various sources he uses, and it becomes clear that he has moved to a more committed but no less circumspect stance since writing his first book. Similar to the books of ex-SMN member Dr Robert Crookall, Paul uses a progressive scheme in describing early experiences, the illusion of the summerland, the judgement, the first heaven, the second death, the second heaven, the group soul and the third heaven. This may sound over-systematic to the uninitiated, but it makes a lot of sense. The process is one of extending self-knowledge and transcending the ego, work that can also be accomplished during physical lifetime. Conan Doyle (p. 127) describes this process of relinquishment of the personality, then comes the transfer of consciousness to what is called the individuality. Paul summarises this as the process of giving oneself up: first, the physical body, then the personality while preserving only the essence of its experience.

In *Hidden Man*, Paul takes the themes of reincarnation and the group soul a stage further, distilling practical spiritual wisdom from the many sources of guidance and reading to which he has had access. He also describes his own sequence of lives and their principal themes of loner, the love of beauty and rebellion. Amusingly, my own review is copied on the back cover, where I say 'readers will find themselves illuminated by this lucid account of his spiritual journey, and will see much to be applied to their own conditions.' I would endorse this assessment on a second reading, and indeed the book becomes more valuable in relation to one's own accumulating life experience. The overall purpose is to awaken the inner man or woman to the reality and centrality of the spiritual life - a life oriented beyond exclusively material concerns. This involves accepting

guidance along the way, a process of continuous learning and a realisation of the many levels of the human being. The purpose of human lives is the return to God in partnership with guidance, along with the refinement of character and embodiment of values. This also represents a process of regeneration on an individual and collective level. It is a practical mysticism that involves putting your inner house in order and realising that the self is not in fact closed but open-ended and an expression of a larger group soul. Meditation is a key practice for opening up.

Paul is clear on the basis of guidance and his own experience that this spiritual evolution cannot be completed in a single human lifetime, hence the need for reincarnation, which may also be an expression of the group soul. It seems that there is a greater sense of union and unity corresponding to mystical experience as one advances spiritually, all of which is underpinned by love and the growth towards oneness of life. I am sure Paul is right when he says that the essential spiritual vision is very simple (p. 125) – this is where love and wisdom flow together. The analytical human mind would like something more complicated, but this is not necessary. At the end of the book, Paul quotes a guide as saying that 'the wise ones do not put their words and long ways, they put them in simple ways but they have to be worked at' in a process of growth. For me, it is also a simple as understanding and applying the principles of love and wisdom. All three books are well worth reading, and especially the last as a source of wise guidance for life.

ecology-futures studies

Sacred Journeys

David Lorimer

IN SEARCH OF GRACE – an Ecological Pilgrimage

Peter Reason (SMN)

Earth Books (John Hunt), 2017, 239 pp., £10.99, p/b – ISBN 978-1-78279-486-8

POACHER'S PILGRIMAGE – an Island Journey

Alastair McIntosh (SMN)

Birlinn, 2016, 329 pp., £20, h/b – ISBN 978-1-78027-361-7

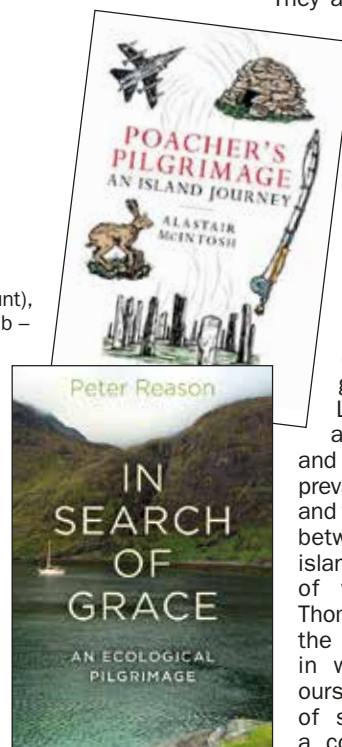
Some years ago at Falkland in Fife, Ian Bradley came to talk about his new book on pilgrimage. I was struck at

the time by his finding that pilgrimage had become enormously popular over the previous 30 years, and that all kinds of people could resonate with the metaphor of life as a journey. Oddly enough, Alastair McIntosh came to speak at the same venue in 2009 just before embarking on his pilgrimage, so the event is mentioned in his book. As Peter explains, the word originally comes from the Latin *peregrinus*, etymologically derived from *per* (through) and *ager* (field, country, land) and it meant a foreigner, stranger, someone on a journey, or a temporary resident. We are certainly all temporary residents on the journey of life. Peter defines pilgrimage as a 'journey of moral or spiritual significance, undertaken in response to deep questions and a yearning for answers from a realm beyond the everyday.' (p. ix) So an ecological pilgrimage is a 'search for an experience of deep participation with the Earth and her creatures.' This is true for both books featuring the West Coast of Ireland and the West Coast of Scotland - in Peter's case mostly on the water, while Alastair walks across his home territory of Harris and Lewis, where his father had been a GP.

The three phases of the pilgrimage are preparation, the journey itself and the return home, plus, in these cases, writing up the experience for one's own benefit and that of others. The habits of everyday life are disrupted and we subject ourselves to considerable physical discomfort and hardship. This intensifies the ups and downs of life, but such experiences are required in order to gain resilience, however challenging they are time. Both writers record their changing moods, sometimes corresponding to the weather, a source of constant concern to pilgrims, especially on the sea.

They also write about being up against their physical limits, about tiredness and exhaustion compensated by exquisite landscapes and a deeper sense of belonging.

Both writers seek and experience the sacred, what Peter calls moments of grace. Harris and Lewis are full of ancient sacred sites and wells. Overlaid on the prevalence of second sight and the thinness of the veil between realities on the island is a bleak Calvinism, of which more below. Thomas Berry wrote about the need for a new story in which we experience ourselves as a communion of subjects rather than a collection of separate



objects. Peter asks what it would take to experience ourselves fully as part of the whole, shifting our way of thinking from a world of separate objects to an interconnected whole, which is also a moral shift towards 'seeing humans as part of the community of life on Earth [the moral gaze].' (p. 10, also p. 138) Alastair's previous work in human ecology and on soil and soul resonates with this concern. This new vision is vital to generate the necessary energy for real transformation, as Thomas Berry insisted.

Part of our sense of alienation is the uprooting from more traditional cosmologies where we were contained within something larger and consequently knew our place and purpose. Peter and Alastair both refer to the work of Gregory Bateson, Alastair quoting his sentence 'Mind is immanent in the larger system - man plus environment.' (p. 17) – he could have added culture. Peter quotes Bateson to the effect that the human mind is driven by conscious purpose, which means the pursuit of short-term goals rather than long-term stability. Similarly, Bateson said that our major problems arise from the differences between the way Nature operates and the workings of the human mind - contrasting cyclical with linear. As pilgrims, the authors become aware of the rhythms and gestures of Nature - light and dark, hot and cold, sunrise and sunset, calm and storm corresponding to inner peace and turmoil. Beyond these polarities are the moments of grace and oneness where we can experience being part of a greater or wider whole. Here the boundaries of our everyday distinction between inner and outer blend, and we glimpse a greater depth as a more conscious traveller.

I reviewed Peter's earlier sea pilgrimage recounted in his book *Spindrift*. In the new book, he describes his pilgrimage in two parts over two years, spanning his 70th birthday at sea and completing the phase of his identity as a sailor by selling his boat and coming back to the fruit trees in his garden. He has a companion or companions for parts of his journey, but much of it is solo, bringing him into an encounter with himself, the boat, the sea, the weather and the landscape. Although the narrative is sequential, the chapters raise larger themes as reading and reflection intersect with episodes on the journey. Pilgrimage as homage or honouring, the relationship between tourist and pilgrim, finding the way - a lot of mapping and consulting charts is essential - dangers and difficulties, meandering and storytelling, silence and solitude, transience, fragility, Earth time, eternal now, deep time and pilgrimage at home. All this is beautifully written as the reader shares a range and intensity of experience. Just as the writer listens, so too does the reader.

Peter draws three lessons from his challenging experiences (p. 121): that the world beyond and beneath human constructions is irrefutably real and its indisputable presence will be revealed; secondly, the pilgrim is alert for signs, trying to remain awake. When we translate this into our ecological situation, we realise that many of us are 'sleepwalking into calamity.' The third lesson is about response - do we have the skill, resources and presence of mind to respond appropriately, both individually and collectively? Meandering and storytelling allows us to enter into the flow of life without imposing our own goals, it corresponds to silence, stillness and deep listening, an emptiness that is also fullness and healing.

In some ways, Alastair's pilgrimage across the land of his childhood is 'knowing place for the first time', seeing with new eyes. The bus ride at the start telescopes the island into a few hours, which extends to 12 days in reverse, a pilgrimage shorter than that of Peter, but no less intense. The land has its own history, including the 18th and 19th century croft clearances intersecting with Alastair's own work on land reform and confrontation with international business interests. Many of the colourful characters of the island are brought to life over the course of a few days, sometimes over a glass of cask-conditioned whisky. The landscape is both sacred and imaginal, the 'otherworld' ever present. The ancient Celtic spiritual heritage, as I referred to above, was overlaid by the strict and severe theological system of John Calvin, with his insistence on human depravity and double predestination - to heaven or hell. As Alastair remarks, this constitutes a theology of fear and control. However, an underlying sense of veneration still breaks through. Beside the gate of an ancient 'temple' site, he came across a plaque commemorating the burial of 400 tattered old family Bibles in 2006. Calvin might have fretted. Was this some idolatrous treatment of the paper, as distinct from its Word? The islanders had the last word in the inscription: 'the grass withereth, the flower fadeth: but the word of our God shall stand forever.'

The dualism of heaven and hell, light and dark, good and evil also informs Alastair's work over many years with the Defence Academy and other military think tanks. American defence thinking, as explained in my review of Paul Johnstone's book *From MAD to Madness* in Books in Brief below, is based on a naïve dichotomy of good and evil and the demonising of the enemy without awareness of projecting one's own shadow. Alastair explains his brief as exploring 'the moral implications of conflict that exceeds military capacity to deter or contain it; and the application of nonviolence, including its

religious basis, to achieve security in a complex world where the net results of conflict are not easy to predict.' (p. xvii). He describes various encounters with high-ranking military and the typical arguments they might deploy as Alastair insists on the courage of nonviolence and deconstructs just war theory. He confronts a number of people with the question - have you killed, lamenting the brutalisation inherent in many conflict situations. He admits his own complicity in being part of the system that destroys life more generally. Thoughtful military comment that he reminds them of their limits, encouraging them to move along the spectrum from violence to nonviolence, towards a spirituality of transformation. Here his thinking intersects with earlier reflections on Calvinism, since he sees the cross as nonviolence personified, while updating the literalistic insistence on ransom and atonement - freeing ourselves from ourselves, and reconnecting with our divine source (p. 262).

These reflections intersperse with the other side of the pilgrimage - the moor, the rocks, the sea, the wind, encounters with sacred wells and sites and with the blue mountain hare and deer, as well as the practicalities of food and shelter, with his trusty rucksack Osprey. People give him eggs and sandwiches for his journey and one can viscerally appreciate the warmth of hot drinks – also a prominent feature for Peter. The pilgrimage is an immersion not only in the landscape, but also in the otherworld of faeries and his concerns for God and war. The metaphor of the poacher comes up in a number of contexts, including the thought that we are all poachers in the flow of life: 'None of us', Alastair remarks, 'or very few at any rate, complete the cycles of gratitude and right relationships that open up to greater depths of being.' (p. 250) This includes a transformative encounter with the shadow, of which many people are still unaware, both generally and in themselves. In that sense, we are all work in progress, and pilgrimage helps us to become more conscious of this journey.

Both of these inspiring books can also turn into vicarious pilgrimages for the reader. I read many of the chapters by the fire in the evening, occasionally with a glass of good whisky to hand. The writers wrestle with central human challenges and the need for transformation, as well as personal and collective resistance to this process. If you are not planning a pilgrimage yourself, then I suggest you set aside time to read both of these books in the pilgrim state of mind as a way of opening up a deeper sense of connectedness with life and Nature and enhancing your own contribution to the current evolutionary transformation.

Reinventing the Human

David Lorimer

WHOLE EARTH THINKING AND PLANETARY COEXISTENCE

Sam Mickey

Earthscan, 2016, 153 pp., £29.59, p/b
– ISBN 978-1-138-74355-7

This timely interdisciplinary study presents 'whole Earth thinking' as a way of ecological wisdom and a response to the challenges of planetary coexistence, apparent not only with species extinction and multiple environmental crises, but also in political and economic flux. The word crisis derives from the Greek '*krinein*', meaning to separate, and implying a fork in the road. This is well represented by a good distinction between what the author calls globalists and planetarians. The first approach stresses control, manipulation and consumption, while the second represents people who view themselves from within the biosphere and who therefore cultivate biological and cultural diversity and seek life-affirming responses to our situation. One could also speak contrast between globalisation and 'glocalisation', the World Economic Forum and the World Social Forum, between trans-humanism and posthumanism. Both these processes are going on simultaneously, but only the second is truly sustainable since the first affirms the primacy of power and the second the primacy of love.

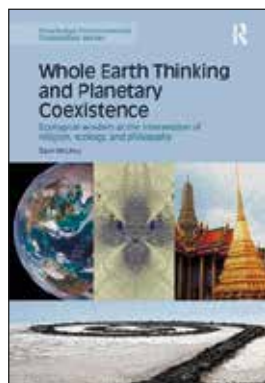
After an introductory chapter on the history of ecology, a word dating back to Ernest Haeckel in 1866, the author provides an overview of different disciplines engaged - the spiritual and religious, including indigenous perspectives, scientific approaches based on complexity and systems theory, then more specifically environmental and social views - all this implies opening up to multiple ways of knowing. The next chapter compares and contrasts the approaches of the 'geologist' Thomas Berry and the French geophilosophers Gilles Deleuze and Felix Guattari, who will be less well-known to most readers. I regard Berry's work as essential reading, since it goes to the heart of our human agenda of creating what he called an ecozoic era where humans become a mutually beneficial presence on the earth - moving beyond a mechanistic collection of objects to a communion of subjects. This is what he described as the Great Work. The French philosophers are much more sceptical about the value of religion, and it is interesting to reflect on the contrasts between the American and French revolutions. However, both

agree on the destructive capacity of individualism and the need for different ways of knowing. The book also draws considerably on the work of Mary Evelyn Tucker and John Grim at the Forum on Religion and Ecology at Harvard.

One of the strengths of the book is its connection across disciplines, as already mentioned, and this includes the political and economic as well as biology and other sciences. Mickey also calls for the reclaiming of subjectivity in a world obsessed with mechanisms and objects. There are many roots of ecological wisdom intertwining in our times: indigenous traditions, classical and philosophical traditions, ways of knowing embedded in feminist perspectives and the experiences of women, and contemporary sciences. Each has a slightly different take on planetary interconnectedness, and the overall process is seen as a creative unfolding, moving beyond anthropocentrism to what the author calls an anthropocosmic view where the self is seen as relational and connected. It is here that he could have referred to the pioneering work of Henryk Skolimowski, whose books are not mentioned but who credit provided a valuable extra series of insights.

There is an important emphasis on community and self-organisation in creating potential networks of care as a counterbalance to the globally dominant extractive economy that turns everything into an object of consumption. Given that we exist in what the author calls a 'chaosmos', this process requires our active participation. I liked his comparison and use of Chinese terms with *yi* as change, *tao* as the way a structure or pattern (*li*) unfolds in a self-organising fashion, and the overarching concept of *shen* as 'the relationality and affective mutuality whereby things fold into a communion of subjects' (p. 117) - we are all enfolded or implicated.

As Thomas Berry, Brian Swimme and others have argued, we need a new narrative and story to make sense of where we need to go. This is a dream of peace, justice and mutuality rather than the New World Order vision of fear, control, domination and manipulation. This latter is the default position unless a sufficient number of people decide otherwise. The pressure is certainly rising, as is the opportunity to take a stand for a culture of love and compassion - how many of us will gather together the energy to participate in this necessary process? This is what the work of Avaaz, Care2Causes, Thrive and others is about, and we have unprecedented capacity to self-organise through the Internet.



The integrative vision of this book provides a good philosophical starting point for a vision of a mutually enhancing planetary coexistence.

Responsible Geoengineering?

David Lorimer

EXPERIMENT EARTH

Jack Stilgoe

Earthscan, 2015, 222 pp., £29.95, p/b
– ISBN 978-1-13869-194-0

In their 2009 report entitled *Geo-engineering the climate: science, governance and uncertainty*, the Royal Society defines geo-engineering as the 'deliberate and large-scale intervention in the Earth's climatic system with the aim of reducing global warming', principally through solar radiation management (SRM). This area has become the focus of a controversial debate on responsible science and innovation with the underlying idea of taking responsibility for the climate. This has become more publicly thinkable since the publication in 2006 of the paper by Paul Crutzen - the inventor of the term Anthropocene - entitled *Albedo enhancement by stratospheric sulphur injections: a contribution to resolve a policy dilemma?* This is encapsulated in the Royal Society press release for the above report with an apparent ultimatum: *Stop emitting CO2 or geo-engineering could be our only hope*. In the foreword to the report, the then president, Lord Martin Rees refers to geo-engineering as a plan B for climate change.

This book draws on three years of sociological research with scientists, particularly from the SPICE project, an acronym for stratospheric particle injection for climate engineering. Human development is already interwoven with the evolution of climate, and the possibility of geo-engineering takes things a stage further through deliberate reflection of solar radiation through spraying particles into the upper atmosphere. The Royal Society press release is somewhat chilling in its implications as CO2 emissions continue to grow and with this fact the pressure will grow for a technical fix without any fundamental alteration in our ways of life, especially as some proponents insist that the technology is cheap and relatively safe- remember nuclear power?

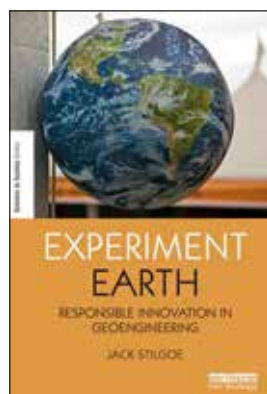
The Royal Society report does not take this view and many participants were reluctant to have the field opened up - their conclusions are summarised in two tables (pp. 116, 118) charting the affordability and safety of various possible interventions. Stratospheric aerosols are thought to be potentially highly effective and highly affordable, while questions exist about their safety. A major issue is that once the process of SRM is initiated, it has to continue indefinitely, otherwise

there would be a sharp temperature increase - and experiments would have to be large-scale in order to yield significant results. Moreover, the skies would turn from blue to white. The science and politics of geo-engineering are inextricably entwined, and the topic was also broached in a 2013 IPCC report, building on an earlier one in 2007. They warn that both carbon dioxide removal (CDR) and SRM carry side effects and long term consequences on a global scale. Interestingly, research models are based on the effects of volcanic eruption, especially that of Mount Pinatubo in 1991.

Ethically, geo-engineering involves both responsibility and uncertainty with a mixture of knowns and unknowns, but also, inevitably, unknown unknowns. In addition, there is a danger of tackling a wicked non-linear challenge with a linear way of thinking. Then there are the challenges of governance and what the author calls a radical new architecture of responsibility in terms of the gradual technocratic ownership of the climate. He says that we should not be scared of geo-engineering, at least not yet, as it is neither as exciting nor as terrifying as we have been led to believe, 'for the simple reason that it doesn't exist. The technologies of geo-engineering... remain imaginary. (p. 199) But is this actually true?

The documentary *Look Up* and the website www.geoengineeringwatch.com provide evidence that geo-engineering is already going on. It is a curious phenomenon of being both overt and covert at the same time - overt in the sense that the evidence is there to see in the sky, but covert because governments insist that nothing is actually going on. What is undoubtedly true, however, is that emissions from aircraft can, under certain atmospheric conditions, spread out into thin cloud; sometimes these clouds join together to form the kind of white haze described in a Scientific American feature. I have observed these trails and subsequent clouds in various parts of the world. A further issue is that many of these sprays are toxic, and what goes up must eventually come down. This is a form of pollution, in any event, and is associated overall with global dimming.

Speaking to the Council for Foreign Relations at the end of June 2016, CIA director John Brennan refers to geo-engineering technologies, and specifically SRM as potentially helping to reverse the warming effects of global climate change - now denied by the Trump administration. Stratospheric aerosol injection has gained Brennan's



attention in the context of the security threat posed by catastrophic climate change. He sees this as a possible way of giving the world economy additional time to transition from fossil fuels, and quotes an estimate by the National Research Council that the cost of deployment would only be \$10 billion a year. He envisages other measures as also being necessary in view of, for instance, ocean acidification.

A paper published in the *Int. J. Environ. Res. Public Health* **2015**, 12(8), 9375-9390 by J Marvin Hendon and entitled *Evidence of Coal-Fly-Ash Toxic Chemical Geoengineering in the Troposphere: Consequences for Public Health* (<http://www.mdpi.com/1660-4601/12/8/9375/htm>) argues that this process is already happening. The author uses two methods: '(1) Comparison of 8 elements analysed in rainwater, leached from aerosolised particulates, with corresponding elements leached into water from coal fly ash in published laboratory experiments, and (2) Comparison of 14 elements analysed in dust collected outdoors on a high-efficiency particulate air (HEPA) filter with corresponding elements analysed in un-leached coal fly ash material. The results show: (1) the assemblage of elements in rainwater and in the corresponding experimental leachate are essentially identical.' The author noticed the phenomenon I described above occurring in the skies above San Diego from the spring of 2014: 'In a matter of minutes, the aerosol trails exiting the tanker-jets would start to diffuse, eventually forming cirrus-like clouds that further diffuse to form a white haze that scattered sunlight, often occluding or dimming the sun.' He found aluminium and barium in post-spraying rainwater, elements that are not normally present. The author also found that there had been a systematic campaign of disinformation, with claims that these trails were nothing more than a condensation of ice particles. In addition, there has been 'no public disclosure, no informed consent, and no public health warnings.' So we have an interesting situation of theoretical discussion, good evidence that spraying is going on and may be toxic and therefore harmful, while governments deny that any such geo-engineering experiments are already taking place. So it looks to me as if this book is excellent as far as it goes, but does not go far enough in addressing what is actually happening. This is another controversial area where readers will have to conduct their own research and reach their own conclusions. There is undoubtedly something that requires further explanation.

The Possible Human

David Lorimer

THE FUTURE

Jennifer M. Gidley

Oxford, 2017, 164 pp., £7.99, p/b - ISBN 978-0-19-873528-1

Jennifer Gidley is President of the World Futures Studies Federation, and is also an educator and psychologist. In this brilliant and concise overview - part of the OUP Very Short Introduction series - she gives readers multiple insights into the field and ways of thinking about the future. She defines futures studies as 'the art and science of taking responsibility for the long-term consequences of our decisions and our actions today.' She is careful to emphasise that the future is not just something that happens, nor is it inevitable, but we co-create it through our thoughts and actions within both a cultural and global or planetary context.

The notion of the future is closely tied to the way we think about time. The French word means what is to come (*à-venir*) while the English word first appears in the 14th century. Gidley traces the origins of linear time to the emergence of philosophy in Greece, while prior societies lived in a more embedded, cyclical sense of time. Taming time is equated with measurement and control and is represented by the emergence of calendars and clocks as well as predictions. Early predictions were prophetic or oracular as we sought to grapple with uncertainty with a measure of both hope and fear. Coming up to date, we find that the US Department of Defence coined a new term in the 1990s: VUCA, which stands for volatile, uncertain, complex and ambiguous - terms we can certainly recognise today, and which are also reflected in scientific developments. The author looks at the thinking of Roger and Francis Bacon and the emergence of a mechanistic and engineering metaphor, which still dominates science today and which is associated with control and precision. However, both Newton and Francis Bacon embodied the tension between modern and hermetic science, and the author correctly notes that Bacon was both the father of empiricism and leader of the Rosicrucian movement in England.

More scientific predictions emerged with HG Wells and JBS Haldane about a hundred years ago, then with Aldous Huxley's dystopic *A Brave New World*. Forecasting becomes more scientific, but there is a danger of simply extrapolating current trends and discounting the unexpected. The German physicist, economist and sociologist Rolf Kreibich warns us about a singular future approach based on 'the scientific-technological-industrial expansion of all aspects of life', which he sees as a tunnel vision and which Gidley contrasts with a more participatory and integral

approach. She considers the implications of the development of robotics, which is partly being driven by the military and aims to bridge the human-machine divide.

This brings her onto transhumanism, which is 'inextricably linked with technological advancement or extension of human capacities through technology.' (p. 92) It is a systematic attempt to overcome some of our biological limits, but it is important to realise that it is based on an ideology of technological determinism and a mechanistic view of consciousness and the human being. These people envisage a new, hybrid species and the creation of a technotopia through techno-fixes. However, as Lewis Mumford was already writing in the 1940s, there is a danger of dehumanisation in this post-human vision that many of its proponents regard as an inevitable development. Cleverness has to be balanced by emotional intelligence and the expression of moral and aesthetic values.

Chapter 5 is in my view the key of the book, focusing as it does on technotopian or human-centred futures as diverging streams already identified by the futurist Willis Harman in the 1980s. He saw two broad possibilities: evolutionary transformational or technological extrapolationist - the latter, as I already mentioned, is based on a mechanistic, behaviourist model of the human being, while the ethos within the Network favours a more human-centred model also promoted by holistic medicine, organic agriculture and publications like *Resurgence*. Gidley explains the varieties of transhumanism, including Teilhard de Chardin, Sir Julian Huxley, Nietzsche, Bergson and Steiner, all with different visions. She then looks at conscious human-centred futures as a counterpoint and based on the evolution of consciousness in a transpersonal direction. Here again, she is exceptionally well informed and points out that we have a choice of either continuing to invest heavily in 'technotopian dreams of creating machines that can operate better than humans. Or we can invest more of our consciousness and resources on educating and consciously evolving human futures with all the wisdom that would entail.' (p. 115)

The final chapter reflects on grand global futures challenges, especially urbanisation, education and climate. Her tables on pp. 119-20 summarise both the challenges and alternative possible responses under various headings such as governance, economic, health, energy, leadership, technology and conflict. As Al Gore notes, many of these challenges are the consequences of



short-term economic thinking and the reckless use of our planet's resources. However, we can contribute to co-creating an ecological and regenerative future rather than continuing extraction and exploitation. The French philosopher Edgar Morin, like Gregory Bateson, put his finger on the educational

challenge: 'one of the greatest problems we face today is how to adjust our way of thinking to meet the challenge of an increasingly complex, rapidly changing, unpredictable world. We must rethink our way of organising knowledge.' (p. 131) In this sense, it becomes very clear that our 'old fragmented, mechanistic, and materialistic ways of thinking are not capable of dealing with the growing complexity of global environmental, economic and societal change.' The situation is not helped by the dominance of linear analysis in our universities, so that young people are coming into the world with inadequate ways of thinking. However, as the author points out in her conclusion, 'we all have the capacity to create our desired features, for more than most of us realise' and we can work collaboratively for positive change and towards the future we prefer.

It seems to me that there needs to be much more public discussion and reflection about the nature of the future that we are creating together in a technological, economic, ecological, cultural and personal sense - and especially of the tensions between the technotopic and human-centred visions. This book not only raises the issues in a highly readable manner, but also raises awareness, and as such I can recommend it unreservedly.

general

The Race for a Less-troubled Civilisation

Martin Lockley

A TROUBLESOME INHERITANCE: Genes, Race and Human History

Nicholas Wade

Penguin, 2014/2015, 288 pp., \$17, p/b - ISBN 978-0-14-312716-1

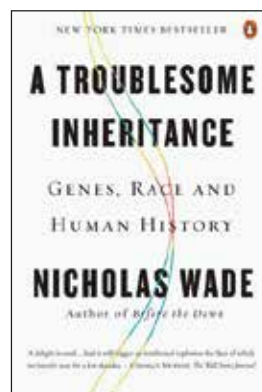
When I first heard of *Guns, Germs and Steel* (GGS), by Jared Diamond, I was disinclined to read it, and still have not done so conscientiously. In reading *A Troublesome Inheritance* by Nicholas Wade I have a better inkling of why my intuition made me avoid the former of these two best-selling titles. Apart

from the 'harsh' title GGS is far too deterministic, accounting for culture in terms of metal weapons, disease, geography and other external rather than human factors. Diamond, like the famous anthropologists Franz Boas and his student Ashley Montagu, deny the existence of race regarding it as a "social construct" with no basis in biology - a "fallacy," a "dangerous myth," "America's original sin." Montagu even labeled it "witchcraft." They evidently believe race (and the diversity it implies) is somehow unrelated to biological and evolutionary reality, having arisen as the result of humanity's conceptual misunderstanding of itself.

The message of *Troublesome* is fairly simple: "race" and its biological, genetic, ethnic and social manifestations is a real phenomenon that can and should be studied without implying that its students are "racists" who believe in the superiority of one race over another. To deny the existence of race because some people are racist is an ideological and unscientific approach popular in some academic circles, mostly because it is a touchy and potentially inflammatory subject like politics or religion. But these too are deeply influential cultural realities.

Eugenics is also a taboo subject. While its extremely objectionable manifestations (sterilisation of perceived inferiors *etcetera*) is despicable, not only is breeding (artificial selection) a deliberate application of eugenics in the plant and animal world, it is also exercised through our free, human choice when it comes to "selecting" partners, often within our own race or ethnicity. Like seems to attract like, with evolutionary implications for biology and our cultural institutions. So race is a biological reality. Wade holds that there is substantial consensus about the traditional threefold distinction of Asian, Indo-European and African (Mongoloid, Caucasian and Negroid), with Australian and Native American as two less populous but distinctive groups. Here Wade reminds us of the famous Dmitry Belyaev experiment with foxes, our mammalian brethren. By selecting foxes simply for their degree of tameness, within a few generations

he bred in many juvenile anatomical features that had not been selected for. If it works for foxes, why not for we human mammals? If no one denies the physical variation in stature, skin, hair and eye color between ethnic groups (races) should we be surprised that there are different manifestations in the sphere of social behaviour and culture, which also correlate with genetic variation?



Here Wade makes the compelling argument, backed up by diverse studies in the broad field of cultural anthropology, that the shift from tribal to city state, nation state and global politics has brought about inevitable change, which in a word has helped “tame” human nature, not least by forcing most individuals, in any given culture, to live and let live with a widening and more civilised community of neighbours beyond the narrow confines of family and tribe. Thus, the murder rate has gone down steadily in the transition from tribal to more regional and nationally-structured polities that have instituted religion, the rule of law and other collectively civilising influences. [For skeptics who doubt such progress, mere rumination on the subject of improving human nature implies a higher aspiration and reluctance to regress]. Skeptics should also note the well-established biological evidence for the ongoing evolutionary juvenilisation of the human species (known as paedomorphosis) leading to a physical gracilisation, or decrease in robustness, and increasing “domestication” or tameness. We are no longer robust Neanderthals, at least in 96% of our genetic makeup (Network 116). Thus, biology and culture remain inextricable interwoven.

There is, it appears, no single gene to ensure “tameness” or civilisation in individuals or cultures as a whole, but “gene frequencies” play an important, collective role. The MAO-A gene is “associated with aggression” and occurs in different frequencies, in different individuals, resulting in different levels of aggression and delinquency in different ethnic groups. So genes influence human behavior and cause it to “vary from one race to another.” *Vive la difference*: but use it not for racist generalisations! Single Nucleotide Polymorphism (SNP) sites on the genome where at least 1% of the population has a non-standard DNA unit have helped define distinctive ethnic groups (races) that are generally consistent with the aforementioned threefold (plus 2) race distinctions. However, races are not sharply defined but rather are “clusters of individuals with genetic variation.” Such individuals give the overall cultural group (cluster) certain propensities [rather as an individual might influence a group culturally]. To date the chicken and egg riddle of whether cultural propensities drive genetic variation or vice versa is unresolved, but almost certainly it is a complex two-way evolutionary dynamic. This exposition is appealing, at least to this reader, because it integrates the complex race debate holistically with biological and cultural evolution, and thus with history, including changing views on race and racism. Put another way, given that race and ethnicity is widely recognised, except by a few ideologically motivated, if well-meaning, naysayers, and is, moreover, responsible for much of what we call history, how

could these cultural, biological (genetic) factors not be interwoven in a complex evolutionary dynamic with everything else in the biosphere, including tamed and untamed foxes, human delinquents and saints!?

Arguably we do not need to use the term “race” as a rigid label, if we recognise, as Wade does, that “human evolution has been recent, copious and regional” affecting all individuals and cultures differently, and complexly, but not randomly. Using the overarching paradigm of cultural evolution (tribal though global polities), we see shifts in the propensity for a domestication, taming and juvenilisation of human nature, though not without reversals and regressions. Perhaps, therefore, we could use the dreaded “r” word in a different context and speak of the “race for a less troubled civilisation.”

I'm Liked therefore I am

David Lorimer

THE HAPPINESS EFFECT

Donna Freitas

Oxford, 2017, 339 pp., \$29.95, h/b – ISBN 978-0-19-023985-5

In this highly informative and readable book, Donna Freitas interviews 184 students from 13 different US universities, with a follow-up 14 survey taken by 884 volunteers, of whom, interestingly, 75% were women. The subtitle indicates the thesis of the book, that social media is driving a generation to appear perfect at any cost, with the huge social pressure that this represents. Young people invariably compare themselves with others, but the comparison on social media can be skewed by the fact that Facebook pages show people's best on the upside of life without any consideration for the inevitable downsides. This creates a split between real and online personalities with the concomitant criticism that the online personality is not in fact authentic. Indeed, young people craft, curate, construct and cultivate what amounts to a brand image online, with eventual employment in mind – sometimes this may necessitate a Facebook cleanup.

We are all susceptible to the opinions of others and seek approval in various ways. In this sense, our self-esteem is vulnerable and on social media is influenced by the number of likes – hence my title above. The tendency is for people to be driven by external rather than internal motivation. The author points out that we used to

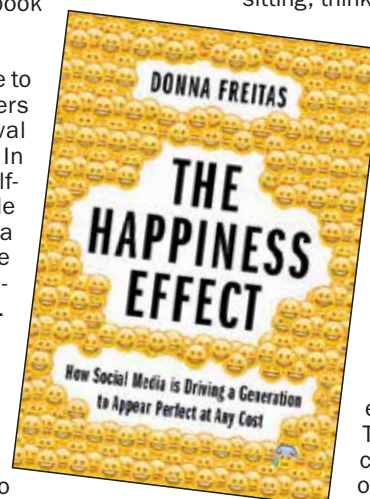
select photos for albums, but these albums remained private. Social media amplifies and publicises these selection effects. The perceived pressure is to be online all the time, which means that the smartphone is regarded as both a blessing and a curse. It was interesting to read how relieved many respondents felt when they were able to take a break from their phone (also because of FOMO – fear of missing out). This itself reflects our society of constant distraction, which also takes us away from the deeper sides of ourselves, and makes us unfamiliar with inner life. Paradoxically, an inner life is all the more necessary in the light of these external distractions.

It turns out that the anonymity of sites like Yik Yak gives students the opportunity to express not only their real opinions, but also hurtful views. In this sense, these kind of sites represent the shadow side as well as a liberation. This is also a common venue for bullying, which brings up the whole question of vulnerability. The findings show that students are wary of online dating apps, and do favour face-to-face meetings. However, relationships can become official on Facebook, as can break-ups. Some students deliberately quit social media, taking time out from online pressure.

The penultimate chapter proposes eight virtues based on Aristotle's idea of the mean. Some of these like authenticity and tolerance are fairly standard, but I wondered if others were in fact virtues. For instance, vulnerability is put forward when one might have used sensitivity or consideration. It seems to me that vulnerability is a state of mind rather than a virtue. Nor am I sure that forgetting is a virtue – what about forgiving? ‘Living in the moment’ is an interesting case as it relates to not doing so because one has one's eye on recording that same moment – there is an amusing account of students having a bad time taking the very photos designed to show what a good time they were having. The virtue of unplugging could be re-expressed as reflection – sitting, thinking and being alone, which

leads into mindfulness practices as a way of coping with this online pressure. This is related to the eighth virtue of quitting, which may require courage in deciding to withdraw. Courage is much more recognisable as a virtue, especially moral courage in this instance.

The final chapter gives advice on how to take control of smartphones, especially on campus. The authorities need to create Wi-Fi oases and opportunities for students



to slow down and just be. The author also raises the question of whether it is in fact ethical for employers to check Facebook pages. It has to be said that young people live in an incredibly competitive world where it is hard to stand out. By the end of this hugely instructive book, I was wondering whether there might be an opportunity to sponsor young people to unplug - say £5 per 24 hours - as a way of raising money for charity. The book not only gives high-level analysis, but plenty of live illustrations of exactly how social media is impacting the lives of young people from different backgrounds - what the author calls the test generation.

A Universalist Vision

David Lorimer

MY DOUBLE LIFE 2 – A RAINBOW OVER THE HILLS

Nicholas Hagger (SMN)

O Books, 2016, 1,061 pp., £34.99,
p/b – ISBN 978-1-78099-714-8

Nicholas Hagger is one of the most prolific and prodigious writers of our time, who has produced 40 books over the last 25 years. His output includes 1,500 poems, more than 300 classical odes after Horace and Ronsard, five verse plays, two national epic poems after Homer, and over 1,000 short stories. He is variously a poet, man of letters, journalist, cultural historian, mystic, philosopher, political scientist, intelligence officer, university lecturer and educationalist. His is a multiple life rather than just a double life of the title. He reflects (p. 564) that 'the only way for an artist in an unhealthy culture to recover contact with his culture's roots is to go back to the past and reflect its vitality in images. As Sir Laurens van der Post observed to Nicholas, this was his path as it had been for TS Eliot, CG Jung and Arnold Toynbee.

Sir Laurens sees Nicholas' work in the same bracket as these other cultural pioneers, especially his work on the creative role of the metaphysical fire or light in his monumental work on the evolution of cultures, *The Fire and the Stones*. Nicholas himself is very aware of his own affinity with writers from previous eras, for instance the metaphysical poets of the 17th century and Ficino during the Florentine Renaissance. His journey belongs both to the hero archetype and to the illuminated thinking of the mystic way. His Universalism is one outlook within different disciplines (pp. 870 and 918):

- Mystical Universalism in terms of personal growth and transformation leading to a perception of the unity of the universe
- Literary Universalism, combining sense and spirit, Classicism and Romanticism in content and method so world literature as a unity
- Philosophical Universalism bringing together East and West, Plato and Aristotle in investigating order and unity
- Historical Universalism, perceiving world history as a unity through the patterns and roots of 25 world civilisations
- Political Universalism focusing on the world unity of the coming benevolent World State that would control what he calls the Syndicate – the New World Order of military dominance and technical control
- Religious Universalism, identifying the common essence of world religions and finally
- Cultural Universalism, identifying a unified world culture

The poles of Nicholas' double life are his practical working and writing lives, the social and metaphysical worlds – he owned three schools with nearly 250 staff. There is an underlying polarity of yin and yang, the +A of the soul and the –A of the social ego harmonised in the One. This volume continues the pattern of paired episodes with a further fifteen structuring and distilling the narrative as well as representing the tension of the transforming soul and the regressive social ego which we all experience to some degree. Nicholas then lists the nodal points or critical experiences within these episodes. He sees the archetypal pattern of human lives as a progress towards a unitive vision through the reconciliation of opposites. Free will, chance and providence all seem to play a role in the unfolding blueprint where our inner compass points home towards the One.

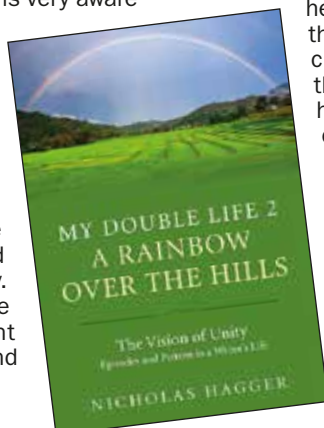
Space prevents me addressing the many themes of this book, so I will confine my attention to two: first, what Nicholas calls the Metaphysical Revolution. In this respect he was an early attender of the Mystics and Scientists conferences, including the first one in 1978. He himself spoke at our 1992 conference on light and explains the background and genesis of his lecture while also recalling conversations with the other speakers including Fr Bede Griffiths and John Barrow. Through John Barrow he also attended a memorable 1992 conference on

reductionism (I was there as well) at Jesus College, Cambridge organised by John Cornwell. Here he recalls exchanges with Peter Atkins, Mary Midgley, Freeman Dyson and especially with Sir Roger Penrose. He is always probing in his enquiries, pushing the boundaries of his interlocutors.

Nicholas played an active role during the 1990s in the Network Metaphysical Research Group that subsequently became the Universalist Philosophy Group then the Science and Esoteric Knowledge Group. He brings many of these meetings to life and cites the contributions of Chris Macann, Peter Hewitt, Max Payne, Alison Watson and Geoffrey Read, among others. He also recalls the day I arranged on Universalist Philosophy at Regent's College and the various initiatives for publications. It has to be said that this metaphysical revolution has yet to happen, and most universities are still very much in the grip of scientism, rationalism, materialism, reductionism and scepticism, i.e. an exclusively left hemisphere approach. Nicholas also records conversations and differences of opinion with Dr Kathleen Raine of Temenos and his good friend Colin Wilson, who could never quite grasp his vision. He has a huge network of contacts.

Nicholas' earlier work in intelligence as well as his own extensive research made him aware of the ambitions of the elite New World Order Syndicate operating behind the scenes and through the Trilateral Commission and the Bilderberg Group. He repudiates their self-interested, covert and explicit agenda of military full spectrum dominance and technological control. Instead, his vision is of a benevolent and democratic world state, which Churchill also thought necessary. The problem remains one of power and how its balance can be shifted, especially as the current world system is arranged to suit the richest and most powerful people and corporations. So the transformative impulse will have to come from below and probably through the galvanising capacity of the Internet.

The fact that this autobiography is based on extensive diaries has both a positive and negative side. The positive is the vividness of the account, including the genesis of his books, family matters, travel, political intrigue and conversations with leading thinkers. The downside is the overwhelming detail – the index alone runs to 80 pages out of over 1,000 and the two volumes make 1,700 pages of reading! Having said this, the book is well organised into shortish sections and gives an intimate view of a multiple, wide-ranging and remarkable life, which should be better known than it is.



Don't forget to Love Yourself

Martin Lockley

THE SELFISHNESS OF OTHERS: AN ESSAY ON THE FEAR OF NARCISSISM

Kristin Dombek,

Farrar, Straus and Giroux 2016, 150 pp., \$13.00, p/b - ISBN 978-0-86547-823-7

When G. K. Chesterton was asked what was wrong with the world, he answered "I am." How many of us would answer this way? Are we, as discussed in *The Righteous Mind* (Network 114), willing to admit the extent to which our emotional, often subconscious, biases underlie our preferred ideologies, which we will defend and rationalise with righteous indignation? In doing so we may toss around labels that suggest others, with different ideologies are ill-informed, unenlightened, narcissistic or worse. It is because of the need for honest self- and other-evaluation that Kristin Dombek's little book on selfishness and narcissism is of considerable interest. Dombek, a cultural journalist, begins her book with the story of Allison, a millennial, "Generation Me" teenager who was ostensibly so spoiled that she demanded that Peachtree Boulevard, Atlanta, Georgia's busiest thoroughfare be closed down so she could celebrate her sweet 16 birthday. This was regardless of warnings that it would snarl traffic and obstruct emergency access to a hospital. Is narcissism the correct label for such selfish behaviour, and is it a rampant new pathology as countless blogs in the "narcisphere" suggest? Or are we just labelling others inappropriately? What does it mean that "selfie" was declared word of the year, or that the pronoun I is used more than ever before? [How many "I"s can literary critics get to dance on the head of a pin?]

Has the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM) given us a correct definition of narcissism when equating it with exaggerated self-importance, fantasies of success and entitlement, specialness, exploitative behaviour, need for admiration, lack of empathy, arrogance *etcetera.*, Since the term Narcissistic Personality Disorder (NPD) was introduced in 1980 the term has been applied to Donald Trump, Bill Clinton (sexually exploitative males) and even to Oprah Winfrey, or anyone ambitious, self-assured or successful who might be a "phallic narcissist." Self-esteem and talking about yourself therefore could be a pathology, causing superficiality, (cultural and /or conversational narcissism), profit motives (corporate narcissism), a sanctimonious sense of piety (spiritual narcissism). Is everyone a narcissist? Are psychologists doing

what other medical professionals and drug companies are doing: inventing pathologies everywhere? There are apps to help you avoid narcissists! [I don't have the app and do run across some people I'm tempted to label! But wonder if there is also an app to do away with labels!]

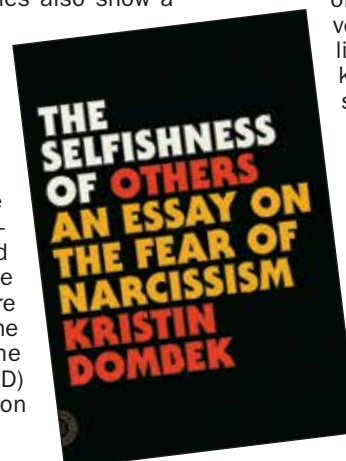
Dombek tells us that the Internet is riddled with pop psychology expositions on narcissism, some fuzzy and nonsensical, and too many allowing us to self-evaluate as victims of "others" who won't commit or love us enough. Since Freud and Havelock Ellis there has been too much erotic emphasis on "self-love." Such thinking has made "self-contentment" appear self-centered, and a self-contained "blissful state of mind" an unwillingness to engage with or be helped by others. [Don't help me while I'm meditating - Please!] In short such Freudian perspectives may have unfairly branded healthy self-esteem as a pathological form of arrested development, and, some critics argue, Freud was "taken in" by his own mythology and certain of his own failed relationships. If you read the Internet and analyse too much you'll find reasons to run away from every relationship: just consider who (Ms. Disgruntlement) might be writing about their own "bad boyfriend" experiences! It's enough, Dombek says, to send a guy into the macho "manosphere" to Google "why is my girlfriend suddenly cold." [He'll likely receive his share of dubious advice and explanations, possibly as just desserts for his own sins]. Philosopher René Girard reminds us that the deceivers are not sharply separated from the deceived, and that we likely diagnose in others our own fears and desires. [Mirror, Mirror!]. Let us remember that Donald Winnicott (excommunicated from Freud's circle) held that narcissism was "a rich source of healthy ego and love."

The plot thickens as the 'Bad Boyfriend' chapter ends with a number of highly successful, but rather nasty, self-confessed narcissist bad boys beginning to grow up a bit and realise they had narcissist mothers. [Blaming the mother / other, facing reality, or perhaps a bit of both?]. Studies also show a positive correlation between narcissism and self-esteem survey scores, even though traditionally the relationship should be inverse, as narcissism is supposed to be caused by low self-esteem! Since it could be that narcissists have high self-esteem and are not empty vessels, some suggest removing the supposed disorder (NPD) from the new edition of APA.

Here's another fascinating plot thickener. Allison's sweet 16 party was planned, well in advance, by her party-loving father. At first she objected, but went along later, when MTV got involved, and it was their influence that shut down one lane of the busy thoroughfare, for just five minutes. Her ostensibly selfish quotes were in response to silly questions encouraging a perceived narcissism, and she was rather embarrassed afterwards. We learn that Allison, (B.A. in psychology), and her boyfriend independently started a foundation to give impoverished kids "the tools they need to succeed." They see class, money and privilege as more divisive than race (she is from a well-to-do black family). When Dombek asked Allison about "Me Generation" narcissism her reply was that while all the blogging and selfies may 'appear' narcissistic, she feels part of a "caring generation" genuinely interested in other people, others she's never met, people whose experience she can learn from. "It's really hard to find someone who no one knows."

Alice Miller wrote that "loss or absence of love ... happened in the past." You can't change that. Dombek says "you can rage against your dependency, the absolute need for the other that can never be satiated." The others, however, are the centres of their universes, places always empty of you. You can study it and theorise it, but if self-other differences were not so "love would never go on very long." In a clever twist Dombek ends with a parody of the APA's definition of NPD by proposing a new entry entitled "Narciphobia." The nine symptoms include: preoccupation with fear that others are self-serving, manipulative or unreal, belief that one is especially unselfish and can only be understood by others who are equally unselfish, exaggerated sense of ability to read other people's motives, quick to judge others, and fear that world will end due to selfishness of others.

Dombek has done her homework, both online and in the traditional academic literature. She reminds us of the original Narcissus story. A prophet told Liriope, a rape victim, and the mother of Narcissus, that her son, a very pretty child, would only live long if he never came to know himself. This original story has been distorted by latter-day interpretations of narcissism. When seeing his reflection in a pool Narcissus does not fall in love with himself: he sees, or thinks he sees another person who is a potentially perfect companion, with many of his desirable, mirror-mirror attributes. But when he reaches for the other the image



ripples, distorts and disappears leaving him distraught and alone. The tragedy Ovid gives us is that the lack of affection and companionship is not to be blamed on others. It reflects our own emptiness. Narcissus is not vain. He is a victim, of not knowing himself. He might have benefited from Kierkegaard's advice "don't forget to love yourself." It seems he was that lonely person that "no one knows." Had he been "on" Facebook, he might have had more friends from the caring generation.

Time to Reflect

David Lorimer

STEP BACK

Norman Drummond – foreword by HRH The Princess Royal

Hodder, 2016, 179 pp., £9.99, p/b – ISBN 978-1-473-61480-2

Norman Drummond's third book is a further distillation of practical wisdom based on his wide range of experiences. Norman is the founder of Columba 1400, an award-winning charity that seeks to change the life outcomes of young people from harsh realities, a former BBC governor, head teacher and Chair of BBC Children in Need as well as the current Chair of the Scottish World War I Commemoration Panel. He is a Fellow of the Royal Society of Edinburgh, a Chaplain to the Queen in Scotland and visiting Professor of Education at the University of Edinburgh. In addition, he is an internationally known coach and speaker on life and business (www.drummondinternational.com). I mention all this as it informs the content and direct style of the book.

I imagine the message of the title will resonate with every reader as our frantic busyness means that we rush from one task to the next without making time to reflect on our values and on what really matters. This reminds me of the aphorism of Archbishop Fenelon, who urged people to meditate for at least one hour a day and, if very busy, then two hours. The book consists of two parts, covering the rich rewards of stepping back and the many ways of doing so. Themes include the importance of attitude, the need to

find your path as well as care for yourself, growing wisdom and letting go of negativity, escaping limitations and stepping up to opportunities, focusing on what matters and overcoming failure, taking stock and keeping going, having faith and making a difference. This last point is crucial as Norman's own life is devoted to service.

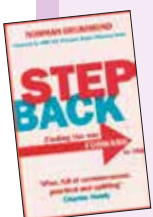
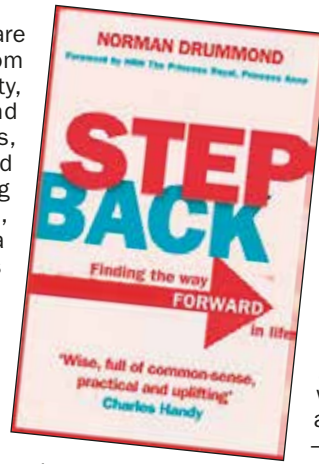
Stepping back can help us develop the key qualities of integrity, courage and open heartedness while restoring balance and rhythm to our lives. One of the features of the book are many pertinent quotations, such as this from Eleanor Roosevelt – 'do what you feel in your heart to be right - for you will be criticised anyway.' Here we need to have clear values and our own sense of integrity as well as courage. In his coaching sessions, where he probably speaks only 15 to 20% of the time, Norman listens deeply and finds that many of his clients suffer from the NQGE syndrome (not quite good enough) when in fact they are MTGE - more than good enough. Sometimes, by doing less we can achieve more, and the book's many panels of questions for reflection will help us in this regard. The core Columba 1400 values are also worth pondering on – awareness, focus, creativity, integrity, perseverance and service, and it helps to have our own space or place where we can go to reflect more deeply on a regular basis.

There are many instructive and amusing anecdotes in the book, including his son Christian getting him to promise that he would watch the whole of a DVD with him on Boxing Day, without realising that the series lasted 11 hours! Another story about Charles Swindoll struck a chord – in his zeal to fit too much into his life, he was caught up in a hurry-up style and became unbearable at home. One evening, his daughter Colleen wanted to tell him something important and began, "Daddy, I want to tell you something and I'll tell you really fast", whereupon he realised what a pass things had come to and said she could say it slowly - to which her response was: "Then

listen slowly!" On another occasion, a self-important businessman came to see Mother Teresa and told her about all his achievements, to which she replied "And what do you do that matters?" The story that made me laugh out loud was a simple parable about a group of forest animals who were discussing a new animal – a bear – who had a list of animals who will die.

The lion and the fox stepped forward first, but they pined away and died when they found they were on the list. Many other animals followed, with the same outcome. Finally, the tortoise makes it to the bear and finds that he too is on the list. Okay, says the tortoise, you can take me off the list - he walks away and lives happily for a long time. We can all choose to get off the list and find our own path.

The second part advises on how to put stepping back into practice. The first thing is to plan to make a start. Without planning this will never happen, and it is best to start small. One easy way is to have a quiet period of prayer or reflection in the morning, as Norman himself does and indeed I do myself. Retreat periods can help us to reboot, also silence or even solitude. Norman suggests a number of searching questions that we can put ourselves (p. 145). As it happens, I was asked to take a walking day myself today with Marianne and some friends, but I have too many book reviews to write, so I will have to plan this for next month! This is truly a book for our times, with its simple message of slowing down, focusing on what matters and keeping things simple, and it finishes with the challenge of daring to look for the best in others and in ourselves - if we want to find a way forward, then it's time to step back. I am glad that Norman took the time to step back to write this book, and I urge you to read and apply its advice yourselves.



When a highly regarded international businessman went to visit Mother

Teresa in the Missionaries of Charity hostel where she, with other nuns, nursed the sick and the poor, he was keen to explain to her all he had achieved. Mother Teresa listened patiently. When he had finished she said to him, "And what do you do that matters?"



books in brief

David Lorimer

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

SCIENCE-PHILOSOPHY OF SCIENCE

Popularising Science – the Life and Work of JBS Haldane

Krishna Dronamraju

Oxford 2017, 367 pp., £22.99, h/b.

Along with his older Eton contemporary, Sir Julian Huxley, JBS (Jack) Haldane (1892-1964) was one of the great 20th-century popularisers of science. This engaging and highly readable biography is the first for nearly 50 years and has been written by one of his last pupils from the Indian Statistical Institute in Calcutta, who is now President of the Foundation for Genetic Research in Houston. JBS was a larger-than-life character, brilliant, eccentric, original and forthright. His father was the almost equally famous JS Haldane of Oxford, who involved his son in – sometimes dangerous – experiments from an early age. His sister was the novelist Lady Naomi Mitchison. Jack gained the top scholarship to Eton and duly became the Captain of the School like such other luminaries as Viscount Hailsham and AJ Ayer. It is rumoured that he was meant to sit the classical scholarship for Oxford but found himself in front of a mathematical paper, and got a scholarship in that instead. He read mathematics and biology in his first year, then switched to Greats in which he naturally gained a First (Sir D'Arcy Wentworth Thompson was another famous biologist who was also President of the Classical Society). This meant that he did not actually have a scientific degree, but went on to occupy many distinguished university positions. As the book outlines, Haldane made significant contributions to genetics, physiology, biochemistry, biometry, cosmology and other sciences.

Following in his father's footsteps, Haldane conducted a number of dangerous experiments using himself as the guinea pig, dealing with poisonous gases. His personal life is also colourfully described and the important role of his two wives Charlotte Franken and Helen Spurway, not without its own controversies – Haldane was disciplined by the university for adultery. In the course of his long career, he associated with many other distinguished scientists, and a strength of this book is outlining their own lives and contributions as well as their relationship with Haldane. These included Joseph Needham, Sir Ronald Fisher, Sewall Wright, Norbert Wiener, Sir Peter Medawar, Jacques Monod and Ernst Mayr. His career as a populariser took off with the publication in 1923 of his book *Daedalus, or Science and the Future*. This contained a number of prescient ideas, particularly in genetics. Like Einstein, Haldane was concerned with the ethical dimension of science, and foresaw challenges if ethical progress did not keep pace with scientific and technological advance. During the 1930s, Haldane became a Marxist, and the author shows how this skewed his approach to the Lysenko controversy. He spent the last few years of his life in India, and became sympathetic to Hinduism while remaining fundamentally agnostic. The

reader comes to appreciate another dimension of his talent in examples of doggerel verse, including a scurrilous reflection on his cancer. As he was dying and thinking about his life, he was able to say "it was a good show!" You can say that again, and I would strongly recommend reading this fascinating account of the life and work of a remarkably brilliant and creative individual. One small caveat: more careful editing would have eliminated various repetitions in the text, but this does little to detract from the overall quality of this biography.

How Biology Shapes Philosophy

Edited by David Livingstone Smith

Cambridge 2017, 351 pp., £75, h/b.

Subtitled 'new foundations for naturalism', this volume elaborates what the editor calls biophilosophy as distinct from the philosophy of biology and is similar in intent to Patricia Churchland's neurophilosophy (she contributes a chapter). The contributions are effectively elaborations of the perceived implications of Darwinism as a foundation for naturalism. These include the demise of essentialism as, for instance, applied to human nature having fixed characteristics, and the 'universal acid' of the Darwinian view of life as a random mechanistic process devoid of meaning and purpose. The reader is introduced to the idea of teleosemantics, which argues that representation is in fact a biological function. Sir Roger Scruton, in his book reviewed below, would certainly not agree with this when applied to rationality. This theme is taken up by Samir Okasha, who proposes a biological rationality based on the idea of fitness rather than having reasons for one's beliefs and actions. This is compared with the maximisation of utility and is explained in terms of adaptation – however, this idea itself is based on a deterministic influence of the environment on the organism, when we now know that this is in fact a mutual and reciprocal process. Machery proposes a nomological rather than essentialist notion of human nature in terms of a set of properties resulting from evolution. This is an important volume for philosophers to engage with as it clearly shows how biologists are now viewing philosophy and attempting to redefine the human condition.

The Usefulness of Useless Knowledge

Abraham Flexner and Robert Dijkraaf

Princeton University Press 2017, 93 pp., £8.95, h/b.

Abraham Flexner (1866-1959) was the founder of the Institute for Advanced Study in Princeton, as well as the author of the famous Flexner Report on the state of US medical schools, which instituted the current biomedical dominance in medical education. His successor provides a biographical introduction to the famous essay which, if anything, is now even more relevant than when it appeared in 1939. It makes the case for basic research, giving historical and contemporary examples of how this later led to practical applications, for instance with the Manhattan project and the development of computers. The short-term culture based on metrics means that basic research is now more difficult to fund, and both authors

advocate a portfolio approach giving space to basic as well as applied research, emphasising the importance of curiosity and imagination. Flexner wanted to create a climate of spiritual and intellectual freedom giving rise to unobstructed curiosity, which he succeeded in doing at the Institute. One Harvard professor enquired before coming about his duties, to which Flexner replied "you have no duties, only opportunities." Interestingly, in this climate people tend to work long hours, and the wife of an English member once asked if everyone worked until two in the morning. Dijkgraaf rightly argues that society fundamentally benefits from embracing the scientific culture of accuracy, truth seeking, critical questioning, healthy scepticism, respect for facts and uncertainties, and wonder at the richness of nature and the human spirit. It is a reassuring thought the Institutes like that in Princeton are still dedicated to blue sky thinking.

Finding Fibonacci

Keith Devlin

Princeton 2017, 241 pp., \$29.95, h/b.

Leonard of Pisa (Fibonacci) published his seminal *Liber Abaci* in Latin in 1202, with a second edition in 1228, but the English version did not become available until 2002, and was 600 pages long. The importance of the book is the way it brought Hindu-Arabic numerals into widespread use along with a huge number of illustrations of practical problems, many about horses (e.g. on p. 122). It was these examples of arithmetic and algebra that made the book so useful to merchants and ensured its wide influence. The Fibonacci sequence itself has an earlier ancestry, and his own illustration is about the breeding patterns of rabbits. The book as a whole gives a fascinating account of the author's journey in finding out as much as he could about the author and his book. Towards the end, he draws an interesting parallel between Leonard and Steve Jobs, also drawing on the work of William Goetzmann about his role in the birth of modern finance. Fibonacci and Jobs initiated revolutions in their respective eras, both of which involved computation and the widespread uptake of new tools. They provided a new interface in terms respectively of the Hindu number system and WIMPS computers and both proved natural and easy-to-use, so one can readily underestimate what a huge step they represented.

Sex, Lies and Brain Scans

Barbara J. Sahakian and Julia Gottwald

Oxford 2017, 146 pp., £16.99, h/b.

This book is a popular overview of recent fMRI research and its implications in terms of prejudice, lying, free will and morality, neuro-marketing and self-control. There is no doubt that this kind of neuroscientific research will have increasingly extensive implications for our society as a whole but this will raise a host of new ethical issues for wider discussion. The authors make explicit the view that the brain gives rise to consciousness and that 'your mind is just your brain in action: it is not a separate entity. When we observe brain activity, we observe the mind.' This encourages a functional outlook, which itself has philosophical and ethical implications. For instance, in a discussion of brain and morality, the authors state that 'moral decision-making appears to rely on many parallel, cooperating systems and brain areas', which makes neuroscience arguably more central than it actually is in a broader cultural context. The privacy of our thoughts may become a more open book, which has potentially beneficial uses in lie detection, although this has yet to be acknowledged as evidence in court - there are still limits. However, and this is not mentioned, such technology has military and intelligence implications that could potentially be used to control populations. All this suggests that we need to take two steps forward in ethics for everyone in technology, and yet, at present, this situation is reversed.

Circadian Rhythms

Russell G. Foster and Leon Kreitzman

Oxford 2017, 143 pp., £7.99, p/b.

About ten years ago we held a Mystics and Scientists conference on cycles and rhythms, since which time a great deal more research has been carried out, as described in this excellent 'Very Short Introduction'. Nearly every living thing uses internal biological clocks to anticipate changes in light and temperature and adapt their physiology and behaviour accordingly - all this can confer an evolutionary advantage. There are differing 'circadian chronotypes', which also vary depending on age. The fact that the rhythm of someone in their late teens is delayed by around two hours compared with an individual in their 50s accounts for what the authors call 'social jetlag' so that asking a teenager to get up at seven in the morning is the equivalent of asking the 50-year-old to get up at five. As all parents will know, 'teenagers are biologically predisposed to get up late and go to bed late', a trend that has been exacerbated by ubiquitous technology. The authors describe recent research on the 'molecular clock' as well as the latest on sleep and metabolism. When it comes to seasons, some animals hibernate over winter, and apparently a chipmunk can reduce its body temperature to 0°C and change its rate from 350 beats a minute to as low as four. I was fascinated to learn that 65% of all bird species migrate and exhibit typical behavioural and physiological changes as a result. In our own case, almost a quarter of our genes show different activity according to the time of year.

Oxford Dictionary of Science

Edited by Jonathan Law

Oxford 2017, 1006 pp., £12.95, p/b.

This is the seventh edition of this dictionary with over 9,500 entries on all aspects of science, 200 diagrams and a number of special features including chronologies of many different fields. The entries are short and concise, enabling readers to grasp the essence of the term. Entries are cross-referenced and some include web links. The biographies of individual scientists are probably the most contentious area, and I was surprised to see a reference to Sir Andrew Huxley but none to Sir Julian Huxley or TH Huxley. An extremely useful volume to have at hand.

MEDICINE-HEALTH

Life Changing Foods

Anthony William

Hay House 2017, 325 pp., £19.99, h/b.

Some readers may recall my review of *Medical Medium*, Anthony William's first book. This practical and beautifully illustrated follow-up gives details of the healing powers of 50 foods under the general headings of fruits, vegetables, herbs and spices and wild foods - the 'holy four'. The book is written against the background of the current epidemic of mystery illness, which is discussed in detail in his first book. He characterises what he calls the unforgiving four as radiation, toxic heavy metals, the viral explosion and DDT and other pesticides. These can all be transmitted through the bloodline and have a general weakening effect on the immune system. Readers learn that we eat about 80,000 meals a lifetime. Anthony reminds us of his thesis that the diagnosis of autoimmune conditions is a misnomer - the body never attacks itself, only pathogens. Each entry contains a description of the healing effects of the particular food, what conditions and symptoms it is most appropriate for, then the emotional support that the food can give, along with the spiritual lesson. Then there are useful tips and an accompanying, often delicious, recipe suggestion. Each reader will wonder about the omission of certain foods, and in my case it was beetroot. There are many fascinating details and readers are sure to discover new information, as I did in relation to garlic and ginger, but in particular with reference to cat's claw, liquorice root, dandelion and wild blueberries. A thoroughly informative and most valuable book.

PHILOSOPHY-SPIRITUALITY

The Wisdom of Frugality – Why Less is More – More or Less

Emrys Westacott

Princeton 2017, 313 pp., \$27.95, h/b.

This book is a brilliant, witty and pertinent reflection on the wisdom of frugality from Socrates through the Stoics to Thoreau. Its starting point is that frugality has traditionally been regarded as a virtue that associates simple living with wisdom, integrity and happiness and therefore as a key to the good life. The author unpacks all this in seven chapters covering the nature of simplicity, why simple living is supposed to improve us and make us happier, then why the philosophy of frugality is a hard sell, and the pros and cons of extravagance. The final chapters are devoted to issue of frugality in a modern economic time of growth, and the environmentalist case for simple living. The discussion is incredibly useful in clarifying implications and overlap of various related concepts and the tension between simple living and the degree of consumerism necessary to keep the modern economy functioning. In our modern world, to what extent is frugality an outmoded value?

The author draws widely on the history of philosophy, showing how recommendations of the simple life are mainly advanced for moral and prudential reasons, although aesthetic and religious considerations also have a bearing on the development of virtue and character. He demonstrates that arguments for frugality and simplicity tend to go hand in hand with criticisms of extravagance and luxury. However, the modern economy encourages us to improve ourselves materially, and reminds us that our spending is another person's income in a single economic system. Moreover, it is clear that some of the greatest works of art and architecture are the result of extravagance, without which, the author claims, the tourist industry would be impoverished. When visiting Florence, does one wish that the Medicis had been more frugal? And the luxury industry is currently worth \$900 billion a year, employing many people in the process. There is a tension between the chapters on frugality in a modern economy (think of the economic consequences of no one in advanced economies buying any Christmas presents) and the environmentalist case for frugality given the impact of our species on planetary resources. However, it is possible to re-channel some demand into new fields, although the overall level of demand is now an important question in relation to advances in robotics - which the author does not refer to. There is much more in this rich book than I have space to mention and I can highly recommend it as a very enjoyable and informative read.

Reason and Wonder

Edited by Prof Eric Priest FRS

SPCK 2016, 211 pp., £12.99, p/b.

Subtitled 'why science and faith need each other', this volume partly arises out of the series of Gregory Lectures that Eric has been organising at St Andrews since 2007 – they are often attended by more than 500 people, which shows the level of interest in the field. The book consists of 13 contributions, including the exceptional introductory essay by Eric himself, which alone is worth the price of the book. Here he provides not only an overview of the possible relationships between science and religion, but also his personal take on a more integrated view. He talks about his own experience as a scientist with creative leaps of faith, sense of duty, wonder and humility, openness and questioning, and trust in the community. He advocates a pluralistic understanding of the sciences' role as an acknowledgement of their limits, especially when it comes to questions of meaning and purpose – why rather than how. This is summed up in an extraordinary quotation from Lord Sacks where he writes: 'Science is about explanation. Religion is about meaning.

Science analyses, religion integrates. Science breaks things down to their component parts. Religion binds people together in relationships of trust. Science tells us what is. Religion tells us what ought to be.' (p. 27)

The rest of the chapters cover a wide range of themes, beginning with a superb discussion by Keith Ward on God, science and the new atheism. There is natural law and reductionism, the origin and end of the universe, evolution, faith and science, and a sophisticated chapter on evolution and evil. Then genes in relation to life, psychology and Christianity, the nature of the person, the relationship between science, spirituality and health; finally, two chapters concentrating more specifically on the New Testament in terms of miracles and trusting the text. Throughout, there is an interplay between reason and imagination in the search for understanding, and of course readers will have their own ideas as to what is or is not reasonable, depending on their points of departure. Theologically, there is an understandable tendency towards more symbolic interpretations as they speak to our contemporary condition. This is a stimulating and wide-ranging volume worthy of careful consideration.

Goddess 2.0: Advancing a New Path Forward

Edited by Rev Dr Karen Tate

Megalithica Books 2016, 215 pp., no price given.

Karen Tate is a well-known figure in goddess studies, and here she brings together wide range of contributors to share their wisdom and vision about a new kind of future based on partnership and caring values beyond the violence implicit in our patriarchal system. The two parts - with over 20 contributions from both women and men - focus on sacred wisdom and sacred action in the creation of a new normal, which presupposes a radical re-evaluation of our institutions and values. The reader comes to understand the close connection between gender issues and caring values, particularly in the contribution from Riane Eisler, to whom the book is dedicated, along with Bernie and Jane Sanders. It is critical to make new connections restructuring the imagination, and bringing in fresh interpretations, for instance of symbolism of the serpent and the feminine as empathy. There is a powerful essay on the connection between feminism and veganism with their renunciation of patriarchal violence and, more generally, the need to articulate a philosophy of power within empowerment, rather than power over. This rich collection makes an important contribution to embodying and enacting a new world view based on compassion, partnership, interconnectedness and empathy.

Why is Easter a Moveable Feast?

Walther Buhler

Floris Books 2016, 80 pp., £7.99, p/b.

It seems that there is a movement to fix the date of Easter across Christendom, but this book explains why this might be a questionable idea. Easter falls on the Sunday after the first full moon following the spring equinox, hence the date can vary by nearly 5 weeks. The concern of this book is astronomical and spiritual rather than practical, and respects the natural rhythms of sun, moon and the seven-day week. Nature expresses itself through polarity, rhythm and balance, and every year is different. Sun and moon are symbolically polar opposites, all the more so at full moon. The author also shows how the seven-day week goes back to the Babylonians before 1000 BC, and the names of the week are still influenced by corresponding planets. In addition, the spring full moon has a special significance as the long winter gives way to light and warmth. In Christian terms, this represents the conquest of death by the divine power of the risen Christ, which has many parallels throughout the Middle East. It is perhaps typical of our own age to emphasise practicality over symbolism and spirituality, but this book redresses the balance.

The Death of the Church and Spirituality Reborn

Reverend John (Middleton)

Christian Alternative (John Hunt) 2017, 138 pp., £9.99, p/b.

This is a controversial and radical book by an ordained Anglican priest who was also a scientist, psychic and therapeutic counsellor. The title indicates the thesis, and it is interesting to note that numbers of Anglican clergy have gone down from 25,000 in the 1970s to 6,000 now, with a good proportion of women. The two parts reflect the title - the author sees the point of religion as spiritual growth and personal transformation, an agenda not always present within the church, or indeed the new age. For him, this means becoming Christ-like and experiencing a real connection with the sacred and a consequent spirituality based on intensity, strength or depth of integrity. He diagnoses a crisis of leadership within the church and a misguided focus on historically based issues rather than connecting people with the numinous. Here he sees a new role for cathedrals in putting on a wider range of events to draw people in and as places for contemplative prayer and meditation. He has an interesting chapter on the differences between prayer, meditation and magic in its true sense. I think he is right in saying that society is far from being nonreligious, so it is crucial to put forward new forms of spiritual practice that respond to people's current needs. There is a widespread need for real spiritual leadership to challenge what the author calls the spiritual darkness and ignorance of our society. This means rediscovering a prophetic ministry and leading by example. This is a trenchant contribution to the current debate on religion and spirituality.

Personal Transformation and a New Creation

Edited by Ilia Delio

Orbis Books 2016, 245 pp., \$26, p/b.

This volume is devoted to the work of Beatrice Bruteau, a new name to me, but someone who was nurtured by both Catholic Christianity and Vedantic Hinduism and was a founder of the American Teilhard Association. The book contains personal reminiscences as well as essays on various aspects of her work, including by Ursula King on a feminine mystical way, the Trinity and evolution, personal and cultural maturation and evolution towards personhood. I resonated with some of the principal themes of her thought, such as the movement from self-separateness to self-participation, from the partial self to the whole self, away from the self as a separate entity towards the self as intimately intertwined with other humans and the entire cosmos. This entails prioritising the values of cooperation, sympathy, compassion and forgiveness as 'the basic value patterns of perception'. It is significant that she was a friend and colleague of Thomas Merton, Bede Griffiths and David Steindl-Rast as fellow bridge builders. She was also a pioneer with her comparative study of Teilhard and Aurobindo. I appreciated Ursula's coining of the new word *pneumatophore* as a carrier of the spirit and an 'expression of transformative, empowering ideas and inspirations' indicated in Bruteau's work.

Joan Chittister

Tom Roberts

Orbis Books 2016, 248 pp., \$28, p/b.

I don't imagine many readers have come across the work of Joan Chittister unless it was in my review of one of her books a few years ago. She has been a Benedictine sister since 1952 and is now in her early 80s. She has held various positions of responsibility, not only within her own community, but also internationally, and has built up a reputation as a leading reformer of religious life and advocate for justice, peace and women's rights. This book is based on a lengthy series of interviews, and gives an unprecedented insight into her background and development and the single-mindedness with which she has pursued her vocation. Like Beatrice Bruteau, she was greatly influenced by the writings of Thomas

Merton with his social engagement from inside the monastery. I appreciated her own recommendations for a contemplative community in terms of making time for solitude, keeping halls quiet, spiritual reading, reflective prayer and sharing insights within the community. She combines enormous competence with a capacity to laugh and enjoy the good things of life while passionately espousing causes dear to her heart. It is easy to appreciate her affinity with Pope Francis in terms of reforming and renewing the Church while at the same time upholding the need for women to be truly included.

108 Mystics

Carl McColman

*Hay House 2017, 257 pp., £12.99, p/b –
www.carlmccolman.net*

This wide-ranging book is a celebration of the many types of mystic divided into nine loose categories of visionaries, confessors, lovers, poets, saints, heretics, wisdom keepers, soul friends and unitives (my dictation system heard lunatics!). There are 12 in each category including well-known and much less familiar names. The format is a brief account of the life and thought of the individual, with selected quotations from their writings and a list of recommended reading. Entries range from 1 to 4 pages that give a sufficient taste of the mystic for people to know if they want to follow up in more detail. I found it interesting that mystics are defined in terms of love and saints in relation to goodness. Even well-read readers will find that they know only about half of those cited, so the book is very enriching in introducing new names from all historical epochs. Other entries like Caussade and Fenelon ring a vague bell, and it was good to see Raimon Panikkar, John O'Donohue and Richard Rohr included. Everyone will have their own list of omissions, and mine include Swedenborg and Brother Lawrence. The book can profitably be read as *lectio divina*, taking only one entry a day and reflecting on the significance of the person's life.

Ecclesiastica Celtica

Sabine Baring-Gould

Imagier Publishing 2014, 229 pp., £15, p/b.

Sabine Baring-Gould (1834-1924) was the author of a 16 volume *Lives of the Saints*, from which the content of this book is taken. He was both a squire and the parson, with enormous erudition and depth of knowledge in his subject. The main part describes a different view of the emerging Celtic church as regionalised and often isolated communities and one of the interests of this book is its treatment of communities not only in Scotland, but also in Cornwall and Brittany – in this sense, he insists that 'Celt' does not mean Scot or Irish, and that the Celtic or ancient British Church was far more Romano-British than people today realise. The third part gives a glossary of Celtic saints, very few of whom readers will be acquainted with. It tells their stories based on the available information. The writing is always concise and well-informed, and readers will gain a new slant on the Celtic tradition and come to appreciate the enormous challenges faced by its communities.

The Oxford Illustrated History of Witchcraft and Magic

Edited by Owen Davies

Oxford 2017, 310 pp., £25, h/b.

The history of this subject is nothing if not complex, with an interweaving between witchcraft and magic, both theoretical and practical, manipulative and defensive. The chapters cover the whole history of the area, beginning with early civilisations before moving on to mediaeval magic, demonologists and witch trials. Then there is a chapter on representations in art, followed by two on popular and modern magic, a chapter on the interface with anthropology, and finally witches on the screen, including in Harry Potter. The essays are highly informative and enable readers to enter into the mentalities

of different historical eras, for instance in defining heretics and heresy. There is a strong dualistic patterns surrounding thinking about demonology and witches, and it is striking to see in a table the very high number of executions, relatively speaking, in Scotland and Switzerland where Calvinism was very strong. Defensive magic comes through in the use of amulets to ward off nefarious influences; and one sees an interesting evolution of thought about magic starting with the early anthropologists such as Frazer and Tylor towards a more participatory and sympathetic methodology. A highly informative volume.

Mastering the Mind and Realising the Self

Stephen Sturgess

O Books (John Hunt) 2017, 216 pp., £13.99, p/b.
www.yogananda-ktiyayoga.org.uk

Stephen Sturgess has been practising yoga and meditation since 1969, and is a disciple of Yogananda - who appeared to him in a superconscious dream in 1982 - as well as being taught by Swami Kriyananda for 30 years. Subtitled 'the spiritual guide to true happiness and inner peace', this wise and beautiful book more than lives up to its title and distils decades of wisdom and practice into a digestible format. The five parts cover the mind, the different states of consciousness, the Self, meditation, and yoga practices for meditation. The whole book is very clearly set out in many subsections and explains in modern terms much of the traditional yoga teaching for gaining mastery over thoughts and feelings. The section on the Self takes the reader through an exercise in transcending physical identity and realising Oneness with the Source, which is our true nature - the I AM. The author provides many helpful affirmations and prayers in the fourth part as well as practical guidance on meditation and yoga practices. A highly valuable book for seasoned practitioners and beginners alike.

Stillness on Shaking Ground

Carol A Wilson

O Books (John Hunt) 2017, 286 pp., £14.99, p/b.

This powerful and dramatic autobiographical novel involves visits to Tibet and Nepal, the latter in a humanitarian aid capacity around the devastating earthquakes. It is certainly more broadly within the teaching context of Karma Kagyu Buddhism, specific aspects of which come to the fore at appropriate times during the narrative. The fundamental theme is love and loss, drawing on two very different kinds of personal relationship as a theatre for attachment and letting go. A critical insight is the realisation that suffering derives from one's own mind and more generally from ignorance. Overcoming persistent habits, however, requires considerable dedication and perseverance. The narrative is intense with detailed observations about people and situations that are also informed by the author's expertise on health and lifestyle. Readers gain a vivid impression of the awful conditions surrounding the earthquakes and the enormous resilience and resourcefulness of the Nepalese people as well as of the central character Olivia. The book engages the reader is at a deep level in relating the character's experience to one's own within the context of finding meaning in a world of impermanence and suffering.

Daily Reminders for Living a New Paradigm

Anne Wilson Schaefer

Hay House 2017, 390 pp., £12.99, p/b.

The author is a clinical psychologist who has written 15 books. Here she uses 31 themes as reminders for living a new paradigm so that the reader comes back to 1 on the first of the month. They show a deep understanding of the whole field of spiritual and holistic living, and include personal qualities like honesty, courage, respect and humour as well as more general themes involving participation, beliefs and assumptions the problem of abstraction, the illusion of control, walking in beauty, taking time, being of service and

moving out of our comfort zones. Each page begins with a short reflection or quotation and today's - February 4 - is about exploring our various selves. The reader will find a great deal of good advice for daily living.

The Illumined Heart and Mind

Margo Kirtikar (SMN)

Create Space 2014, 158 pp., no price given -
www.margokirtikar.com

Margo has been able to perceive other levels of reality since she was a child, and has spent a lifetime developing her spiritual understanding through intensive study and practice. Her contention is that we are at a time of critical awakening and have the capacity to align with our divine selves and achieve ascension while at the same time opening to unconditional love - not every reader will be able to follow all the way, especially when it comes to moving through dimensions, although I can appreciate the importance of transforming negative into positive, fear into love and limitation to freedom. It is an evolutionary process on both an individual and collective level. Margo describes some significant experiences and encounters of her own while instructing the reader on means of opening the mind and heart. I was interested that there were quite a number of chapter heading quotations from Walter Russell, but no discussion of his work as such. At a time when every social gathering involves a discussion of views about Donald Trump, I was heartened by Margo's closing remark that we can live in the present as spiritual beings and 'with a simple shift in perspective we can move our focus of attention away from the evil, the separation, the violence and greed to the new world of love, interdependence, trust and sharing' - what Charles Eisenstein calls the beautiful world we know in our hearts is possible. Margo gives the reader plenty of encouragement on the way.

The Healing Power of Life Alignment

Philippa Lubbock - www.life-alignment.com

Watkins 2017, 191 pp., £12.99, p/b.

As the title suggests, this book is about realigning body, heart and mind with soul purpose and is derived from work of Dr Jeff Levin, who was a speaker at Beyond the Brain in 2003. Levin underwent some extreme experiences, pushing himself to the limit, and received inspiration and instructions about this form of healing from beings of light. The philosophical basis of this book will be familiar to most readers in terms of the priority of inner over outer, the central role of love and the importance of interconnectedness. This is expressed in the sequence consciousness> field> form. The underlying thrust is the individual and planetary transformation of consciousness through greater alignment with our higher purpose that brings all aspects of life into balance and a state of coexistence. We have become disconnected from the Oneness from which we have all emerged, and need to find ways of reconnecting at all levels, which this inspiring book shows readers how to do in terms of presence and relationship - developing the qualities of being of generosity, patience, equanimity, perseverance and concentration. All these theoretical points are usefully illustrated with case histories.

On Human Nature

Sir Roger Scruton

Princeton 2017, 151 pp., \$18.95, h/b.

This book is based on a series of lectures at Princeton and some of the same themes as his earlier book *The Soul of the World*, which I reviewed in the previous issue (p. 65). It is a riposte to the views of evolutionary psychologists, utilitarian moralists and philosophical materialists in defending human uniqueness as persons in relation to each other with a mutual sense of responsibility. Our self-consciousness is the foundation of our moral sense, and Scruton insists that there is another order of explanation beyond biological functionalism - the *Lebenswelt* of intentionality and rationality. He sees the danger of biological reductionism as nurturing a notion

of living down rather than living up to certain standards. If reality is to have a meaning, then so must notions of praise, blame and forgiveness, which cannot be accounted for purely in biological terms. This leads to his idea in the last chapter of sacred obligations involving dedication of one's being. He sees subtle moral and religious notions such as redemption as much better explained through Dostoevsky's Brothers Karamazov than philosophical discourse.

A.N Whitehead's Thought through a New Prism

Edited by Aljoscha Berve and Helmut Massen

Cambridge Scholars 2017, 264 pp., £52.99, h/b.

It is interesting that there is such widespread enthusiasm for the development of thought of Alfred North Whitehead (1861-1947) and his process philosophy. This book and the next are volumes three and four of European Studies in Process Thought. The two main sections are devoted to methodology and application related to physics, religion, education and psychology. Whitehead sought to reconcile the empirical and the rational and there is his brilliant definition of speculative philosophy in the first essay: 'the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted.' One overriding theme is the contradictory nature of fundamental concepts characterised by opposing features with mutual relatedness. One of these is the tension between the continuous and the discrete or succession and duration (based on the earlier work of Bergson). While the discussion here is illuminating, the authors could have benefited from Iain McGilchrist's discussion of paradox in relation to left and right hemisphere thinking. The left hemisphere is unable to accommodate this, while the right hemisphere reconciles these apparent opposites. One of the most interesting essays is on the problem of harmony in classical Chinese religious thought, contrasting its expression in beauty and peace. Another discusses Whitehead's disaffection with dogmatic theology that banishes novelty. Then there is an interesting contribution on Coleridge, Emerson and Whitehead, and a final stimulating essay by John Pickering on evolutionary metaphysics, which questions the computer metaphor and the disembodied vision of the future in transhumanism.

Recent Advances in the Creation of a Process-Based Worldview

Edited by Lukasz Lamza and Jakub Dziadkowiec

Cambridge Scholars 2017, 227 pp., £52.99, h/b.

This volume demonstrates the interdisciplinary reach of Whitehead's thought across society and politics, education and language, theology and God - all concerned with creating a unified view of life and way of living. Politically, the notion of a social organism is proposed as a viable metaphor for modern society, while contributors are also concerned with our harmonious co-evolution with Nature (this recurs in the book below). Educationally, the key theme is appreciation for lived human experience, while in terms of theology there is good deal of elaboration of Whitehead's ideas on the nature of religion and God. One interesting thought experiment is whether world peace is an inevitable development, and if so how this could come about through a far greater sense of solidarity. Itow discusses the interesting notion of systemism as a reconciliation of individualism and collectivism, while Wang highlights the convergence of David Griffin's constructive post-modernism and Chinese Marxism, a surprising and promising development. I also like Muray's notion of biocracy as another form of deep ecology. In the theological section, there are some interesting reflections on beliefs as processes, where the reader meets Angel's term 'credition' to identify the process character of believing, of which the basic unit is a 'bab' that includes a propositional aspect, an emotional loading, a sense of meaning and a degree of certainty. Much of the subsequent analysis is related to the relationship between cognition and emotion. This seemed to me a useful development, especially as our beliefs do not remain static.

Protecting our Common Sacred Home

David Ray Griffin

Process Century Press 2017, 110 pp., \$12, p/b.

I never cease to be amazed at the volume and diversity of David's output. He boldly tackles completely new areas, not only in his many volumes on 9/11 but also in his more recent work on climate change before returning to the nature of God - see John Kerr's review in this issue. Here he elaborates on his most recent shorter book on climate change by reflecting on the similarities between process thought and Pope Francis, with his recent hugely influential encyclical on the environment. He shows how prominent Conservative Christian politicians can be complacent about climate change as they continue to rely on an outdated concept of divine omnipotence. He laments the ethical and cultural decline that underpins our general complacency, and criticises the idolatry of money and economic growth. On the reconstructive side, he discusses nature and evolution as sacred, arguing for accepting the philosophical implications of fine tuning rather than invoking a multi-verse. He sees evil in relation to divine power as representing a necessary tension between value and risk. Finally, he elaborates an important concept of a life protecting world order representing our inherent interdependence and concludes with a summary of parallels between process philosophy and Pope Francis. The book packs many important ideas into a small space.

PSYCHOLOGY-CONSCIOUSNESS STUDIES

Your Brain's Politics

George Lakoff and Elisabeth Wehling

Imprint Academic 2016, 130 pp., £9.95, p/b.

George Lakoff is well known for his work on metaphors, and in this seminal dialogue he explains his ideas with great clarity, forging important links between neuroscience and politics in the process. His starting point is that we necessarily reason in metaphors and that metaphoric thought is unconscious as well as being culturally conditioned: 'metaphors structure our everyday cognition, our perception of reality.' For instance, we associate more with up and less with down, sometimes also using North and South in the same way. There are also many metaphors associated with love: partnership, becoming one, love or affection as warmth. As one reads, one becomes increasingly aware of the power of metaphor and hence of Lakoff's argument.

One of his central contentions is that two idealised family models are translated into politics: the strict disciplinarian father associated with Republican conservatism, and the nurturing and empathetic parent linked to Democratic liberalism. These frames have very different political implications and sometimes we waver between the two. Those strongly committed to one side or the other are unlikely to appreciate the strengths of the other position and it seems that conservatives are better at communicating their moral values than liberals. For conservatives, toleration might be interpreted as moral weakness. The psychology of gun control also makes perfect sense within this metaphorical understanding. Interestingly, Reagan's emphasis on values was much more persuasive than his policies. These metaphors can also be used to frame political debate and appeal to the pre-existing frames within ourselves. Frames are defined as cognitive configurations that structure our world knowledge and make sense of information. In the context of science and parapsychology, the materialist frame is unable to accommodate these phenomena. In addition, negating a frame activates that frame. Sometimes, frames have very different implications as with the contested concept of freedom, often used in inaugural speeches. This book is a very accessible introduction to these important ideas.

Opening the Doors of Perception – the Key to Cosmic Awareness

Anthony Peake (SMN)

Watkins 2016, 267 pp., £10.99, p/b.

In this sophisticated and well-informed book, Anthony takes as his point of departure the experience of Aldous Huxley, updating his ideas with contributions from virtual reality and holographics and building on his own previous work postulating an important distinction between the Daimonic consciousness of the right hemisphere and what he calls the Eidolonic consciousness of the left, although this is clearly not informed by the work of Iain McGilchrist, who would question his use of the word dominant in this context. Building on previous work, he proposes that 'reality is generated by a form of simulation analogous to that of a first person computer game' (p. 23) working along digital or holographic principles. This means that 'consensual reality itself is an illusion and everything is simply digital information' - a rather startling statement for the naïve realist. Huxley himself felt that each of us was potentially Mind at Large, but the normal functioning of the brain prevented us from realising this and accessing what Anthony calls the Pleroma. Huxley's experience with mescaline convinced him that there were other realms of consciousness waiting to be discovered.

An original part of Anthony's thesis, covered in the second part, claims that there is a 'spectrum' of illnesses that trigger certain neurophysical and neurochemical processes opening up the channels of communication between Daemonic and Eidolonic awareness as a series of 'staging points': autism, savant syndrome, migraine, temporal lobe epilepsy, schizophrenia and Alzheimer's disease. He covers the phenomenology of these conditions in a series of chapters where patients get glimpses through the doors of perception and therefore of the Pleroma (an ancient Gnostic term). He continues his investigation by looking at a number of people who entered into trancelike states and discovered further reaches of consciousness: van Gogh, Strindberg, temporal lobe epileptic Jayne Burton, Australian autistic author Donna Williams, American neurosurgeon Eben Alexander, and Pat McCreath, the mother of member Maggie la Tourelle and the subject of her book on Alzheimer's. The final part is an extended theoretical discussion further developing the model that the brain acts as a receiver and that consciousness is located somewhere else (p. 210). Maybe our lives are also a form of simulation in which we temporarily forget who we are, caught up in maya, as Eastern sages have suggested. Occasionally, we get a hint that we have played the game before - this is a book that does more than open up the doors of perception, it also opens those of a new frontier of understanding and an exciting agenda for the science of consciousness.

Unbounded! – Vol 2

Rolf Ulrich Kramer (SMN)

Shaker Media 2016, 364 pp., no price given, p/b.

This second volume on exploring spirituality through MindWalking goes even further than the first volume into extra-terrestrial matters. The theme of getting to the root of traumas or identifying what Ulrich calls the primal incident continues, with further discussion of role of mental files and mental fields and the experiences appearing on the mental screens of clients. This volume contains case histories on the period between lives, angels, close encounters and spiritual beings. Ulrich is sanguine in his interpretations, emphasising the transformative role of the experiential sessions and the reality of the mental imagery, whatever its status. The last part of the book is devoted to an extensive discussion of fundamentals of the method, including ten laws of the mind and MindWalking principles. It is interesting to find this at the end rather than the beginning of the book so that readers are acclimatised by case histories and realise the extent to which the principles are derived from clinical experience. Among the most useful concepts is the action sequence of intention,

execution and completion, which is particularly interesting in relation to unfinished business represented traditionally by karma; then the vortex of forgetfulness often referred to by mystics such as Plotinus, where we forget our true spiritual identity.

A key spiritual skill is maintaining one's composure in these other worlds where we are subject to historical and psychological influences - this is explained as 'acceptance capacity', defined as 'the faculty of experiencing consciously, and without any diminution of serene equanimity, any type of perceptual content with intellectual understanding as well as emotional empathy.' (p. 326) Ulrich explains the dangers of what he calls the Global Violation Zone, a dense fog of interconnected mental fields surrounding the Earth. He reminds readers that fields and pictures lose their power when we have the courage to engage with them, all in the quest for freedom - including freedom from one's past - the truth sets you free so 'what has set you free must be a truth.' I found the ten laws of the mind instructive as a guide for living and transforming negative patterns and attitudes; ultimately, love and goodness can win out, and we are responsible for our general mental state. The principles are clearly articulated and explained as a set of practical and workable truths. These two volumes are an invaluable psychological and spiritual record which should be widely read by consciousness researchers, and the principles articulated make a great deal of sense as a spiritual philosophy of life.

Soul Survivor

Bruce and Andrea Leininger with Ken Gross

Hay House 2017, 281 pp., £9.99, p/b.

For those interested in children who remember previous lives, this is one of the most interesting recent cases involving James Leininger, who began to recall a life as a US World War II fighter pilot in the Pacific, who was shot down and killed in early 1945. His memories initially emerged in nightmares and were expressed in drawings; he was able to give specifics of his name, the aircraft carrier and the names of some colleagues, which enabled his family to do the detective work ultimately resulting in verification of the details he remembered. This was a real challenge for Bruce with his traditional Christian faith in individual salvation, but he came to accept the genuineness of his son's recall. As with many cases of this kind, James no longer consciously remembers the details. The whole book is woven into a continuous narrative that brings the story alive.

The Choice for Love

Barbara de Angelis

Hay House 2017, 281 pp., £20, h/b.

This book is the inspiring follow-up to *Soul Shifts*, which I reviewed in these pages last year. It is about entering a new, enlightened relationship with yourself, others and the world by experiencing love from the inside as a vibrational state of being. It is a dense book full of insight and useful exercises and reflections, as well as drawing on the author's own experiences and those of her students. One extraordinary story concerns woman called Tanya who phoned into her radio programme explaining that she was about to jump off a cliff and commit suicide, when a red book cover caught her eye on a nearby bench. It was the previous book *Soul Shifts*, and was literally a lifesaver. The three parts of the book address a new relationship with love, essential healing for the heart, and living in love. Barbara uses some good metaphors such as untangling the heartstrings, defrosting the heart and clearing the sacred circuitry so that more energy can flow through us. Frequently, our experiences of intensity are a form of resistance that we need to move through. We are in fact prewired with sacred circuitry but it is up to us to clear the short-circuits and disconnections, so that more voltage can come through. Healing the heart involves courageous compassion as well as what she calls necessary relinquishments - unlearning, releasing and forgiving, especially in relation to our

inescapable experience of loss. However, as she argues, it is always possible to choose more love in any given situation, without forgetting compassion for oneself as well as others. This can inform our everyday experience, even in terms of gratitude and serving those closest to us. By embodying love, we are also embodying universal oneness, a spiritual practice which could not be more important at this time.

Remembering the Light Within

Mary R. Hulnick PhD and H. Ronald Hulnick PhD

Hay House 2017, 267 pp., £12.99, p/b – www.usmononline.org

The authors distil over three decades of work in spiritual psychology into this inspiring book. As implied in the title, we all tend to suffer from spiritual amnesia in the sense that we do not really remember who we are in the widest and deepest sense. The book is based on 33 principles of spiritual psychology and essentially on the key ideas of universal consciousness, the nature of God as unconditional love and therefore our own essential nature as love. The book is about recovering a living sense of this in terms of what the authors call the soul line (being), as opposed to the goal line of physical reality (doing). They show the importance of perceptions, beliefs, experience and intentions in terms of what we call outer reality mirroring the inner. A major step on the path is moving from the judgement of ego to the acceptance of soul, which includes reframing our issues as blessings and transcending our comfort zone of security, control and resistance. This enables us to move into a space of what they call divine unknowing, characterised by freedom, creativity and inspiration. The authors give many examples of this process from their own experience and provide suggested intentions at the end of each chapter. Self-compassion and self-forgiveness also represent an important step in the process. I enjoyed the chapter on preparing for sleep, and especially the practice of appreciating each other last thing at night. The authors remind us that awakening is not just personal matter, and should lead to commitment and service. This is a valuable guide to living a soul centred life.

The Five Side Effects of Kindness

David R. Hamilton

Hay House 2017, 179 pp., £10.99, p/b.

This is David Hamilton's second book on kindness, assuring readers that it will make them feel better, be happier and live longer. Specifically, the chapters are about kindness making us happier, being good for the heart, slowing ageing and improving relationships, observing that kindness is contagious. This is a very simple message that everyone can apply in their everyday lives, and this also makes many suggestions of specific actions we can take as well as illustrating the ease with some disarming stories - none more so than he gave a man carrying a heavy TV a lift uphill, telling him to pay his kindness forward. Hamilton was surprised when, 10 minutes later, he saw the same man carrying the TV back. On enquiry, it turned out that he had stolen it! The arguments are well backed with scientific studies and one can discern the relationship between kindness, compassion, altruism and gratitude, all of which involve giving to others, which makes us feel better about ourselves. The key hormonal factor seems to be the production of oxytocin. I was reminded at the end of the remark by Aldous Huxley that he was somewhat embarrassed to admit, after 45 years of research and study, that the best advice he could give was for people to be kinder to each other. If you need any convincing, this book will provide you with plenty of inspiration.

Consciousness Becomes You

Angie Aristone and Roderick Alan

O Books (John Hunt) 2017, 246 pp., £15.99, p/b.

This fascinating book is informed not only by the authors' joint expertise in anthropology, chemistry and biophysics, but especially by Angie's sensitive work as a psychic medium in

which she is much more consciously aware of what they call the connected mind rather than the survivor mind. The notion of the connected mind is a very useful one and is closely related to the universal mind of New Thought. As the authors argue, we are in fact much more telepathically sensitive than we normally admit, because we do not pay sufficient attention to what is going on around us. Moreover, orthodox science pours scorn on the whole parapsychology field, and especially on synchronicity, which they dismiss as pure chance. Readers of this book will find themselves challenged by some of the stories, which to me only make sense in the context of the connected mind. These go back a long way, but Angie's experiences are always bringing in new examples.

The first part is informed by neuroscience and physics as the authors make the case for mind beyond the brain. They concentrate on Karl Pribram, but could have mentioned the pioneering work of William James in this area. Significant concepts include synergy, wholeness and coherence. In the second part, they explain in more detail what they mean by the connected mind and subtle sensory information apprehended by means of what they called clairscience. Communications of this kind include not only living people, but also the so-called dead and animals. Angie reports that the dead tend to communicate through showing images, although this can lead to situations where a number of people identify with a particular description in a communal setting. Spiritually, readers are encouraged to identify with their greatest good and trust their inherent wisdom and intelligence; then to take time to be silent, to pay attention to subtle cues and to love with all our being - good advice indeed.

Discovering your Soul's Purpose

Mark Thurston

Tarcher 2017, 262 pp., \$16, p/b.

This is the second edition of a book first published in 1984 about finding your path in life, work and personal mission according to the system developed by Edgar Cayce with his many readings. The premise that we are each born with a purpose, and that this can be discovered, even if there are obstacles on the way and we are distracted by constant busyness. The author describes a four step pattern of cooperation, self-knowledge, values and ideals, and faith, by which he means an experience of unseen reality. He draws parallels with Jung's concept of individuation as well as Victor Frankl's logotherapy. With the Cayce perspective, a personal mission is situated within a series of lives and social connections and involves being in touch with the individuality underlying the personality as well as being generally aware of one's type. Self-awareness comes from self-observation recommended by Cayce but also by Gurdjieff. The case histories bring the process alive and make it easier for readers to relate the process to themselves. The book contains a useful compendium of qualities and skills used to identify one's strengths. Ideals are also critical, particularly at the spiritual level, and underpin the importance of service. All this helps to define a personal mission. Then comes the practical application in the second part, involving commitment and action. The overall direction is towards responsible co-creation consistent with many emerging patterns in our time.

ECOLOGY-FUTURES STUDIES

From MAD to Madness

Memoir by Paul Johnstone, commentary by Diana Johnstone

Clarity Press 2017, 299 pp., \$29.95, p/b.

This is an unusual as well as powerful book, based on 20 years' experience of the upper echelons of US intelligence from the late 40s to the late 60s. It is essential reading for understanding the underlying patterns of thought and war mentality that still prevails in the Pentagon. Paul Johnstone describes many studies in which he was involved with issues involving air targets, nuclear war, strategic weapons

and the Berlin crisis of the early 1960s. There are some chilling phrases in his analysis, including 'blast effect' and 'bonus damage'. Just as Thomas Merton argued, target = city, and people become just numbers. It becomes clear that intelligence is designed to support beliefs and doctrines and hence political decisions, as we saw clearly in connection with the Iraq war - however, ambiguities always remain: clarity and certainty are hard to achieve. In any event, the human is always the determining factor. Psychologically, a threat is required in order to create an enemy that justifies nuclear build-up and even a pre-emptive first strike. This Manichaeist worldview sees the US as the good guy needing to get tough with the bad guy, whether Russia, China or ISIL - from Soviet threat to Muslim threat. The war mentality requires an evil enemy in order to justify total destruction and sustained military budgets. (I arranged a Network conference on the enemy image 30 years ago!)

The book shows how the use of the atomic bomb in Japan was essentially a political rather than military decision - the senior military advised against it. However, it was an immense show of power and it is interesting to learn that Hiroshima was a uranium bomb and Nagasaki a plutonium one - they wanted to check that both worked, and this then formed the basis of the Cold War relationship with Russia, which had been an ally during the Second World War. A key insight in our own time is the implementation of the neoconservative Wolfowitz doctrine embodied in the Project for a New American Century of 1998. It is all about preservation of American hegemony and therefore the undermining of potential enemies. It also gives the US the right to intervene where it chooses and criticise other countries who do the same. And as John Pilger also argues, NATO has moved bases right up to the Russian border with a predictable response from Putin, who is then demonised (one has to remember the triumphalism of the 1990s and the humiliation of Russia, also remarked on by Gorbachev). Meanwhile, even under the Obama regime, the development of new tactical nuclear weapons continued, with improved warheads and delivery systems designed to sustain nuclear primacy. The Federation of American Scientists estimates that the US now deploys 200 ready to fire nuclear warheads in Europe based on the perceived right to carry out a nuclear first strike. This enemy-centred foreign policy is a continuation of the thinking of the 1940s and based on a dualistic worldview of good and evil justifying potential destruction. As Diana Johnstone observes, the pursuit of absolute domination is unsustainable, and we must regard each other as partners and move towards 'a new world order based on cooperation rather than fear.'

Grass-Fed Nation

Graham Harvey

Icon Books 2017, 280 pp., £18.99, p/b.

Graham Harvey is a journalist who is also one of the co-founders of the Oxford Real Farming Conference on low input, ecological agriculture. As the title suggests, this book is an impassioned argument for a traditional, grass-fed and rotational crop system that nourishes the soil and produces healthy food at the same time. In short, this is a biological rather than a chemical agriculture, and the author shows how chemical agriculture is compromising soil quality, as also recognised by a World Bank report of 2009 recommending an ecological future for agriculture. As we know, this is not the agenda of agrochemical agribusiness with its vision of continued use of chemical inputs and reliance on GM, pesticides and herbicides. The author reminds us of the ecological, wildlife and landscape destruction that has already taken place while providing us with far too much wheat, which itself, along with sugar, is the source of many of our health challenges. Much of this wheat is either refined into processed foods or fed to animals.

Recent research shows how chemicals are actually destroying soil ecosystems, and therefore undermining long-term food security. Harvey shows how a return to mixed farming could

benefit the health of the soil and our own as a result. This vision was shared by Sir Albert Howard and Sir George Stapledon FRS, but the post-war regime of production maximisation supported by subsidies undermined the pre-war system and is now locked in to government, science and agriculture. There are some signs that things are moving in the direction recommended by the author, and a powerful argument is the way in which carbon can be locked into the soil as a huge contribution to climate change policy. This book points the way to a renaissance of real agriculture beyond the current agrichemical system, while on the way demolishing the oft repeated arguments that only GM can feed the world.

Saving Capitalism

Robert Reich

Icon Books 2017, 279 pp., £18.99, p/b.

This book follows up the author's earlier *Supercapitalism*, in which he discusses the dangerous undermining of democracy by capitalist elites. The situation has become more acute since I reviewed the earlier book, with economic inequality and political discontent at record levels. The author reverts to the older expression, current when I myself learned economics, of political economy. This reminds us that economics and politics are related and, crucially, that economic and political power can shape markets. The author reminds us that the free market is not some abstract and neutral concept, but is rather shaped by interests for their own benefit. In the last 30 years, this has been increasingly the financial and political elite - CEOs now earn 200 times the average wage, when it was 20 in the 1970s. Meanwhile, the average wage in real terms has declined from \$35 to just over \$10.

The first part analyses the five building blocks of capitalism in terms of property, monopoly, contracts, bankruptcy and the enforcement mechanism. Market power can maintain more monopolistic prices, while revolving doors between government and industry ensure continuing influence and, in the case of Monsanto, an army of lawyers is employed to defend their corporate interests. In addition, there has been considerable consolidation, for instance in banks, where the five largest now control 45% of banking assets where the figure was 25% in 2000. The second part considers pay and work, exploding the myth of executive pay being related to meritocracy as tautological and a 'fabricated logic'. It turns out that CEO pay has also been driven by the award of stock options, which in turn encourages short-term thinking.

The third part is about countervailing power. It is clear that there is widespread social discontent as expressed in the results of recent elections, and there is an urgent need for a countervailing power to capitalism. Although the reader can appreciate the absolute necessity for this, the way in which this might come about is as yet unclear and we know that existing powerful interests will defend their positions from behind a free-market smokescreen demonising government interference. The author suggests a number of necessary reforms, including on campaign finance, and the shifting balance from shareholders to stakeholders in terms of the make-up of corporations. He also looks at trends in different types of work - routine production services, in-person services and symbolic-analytic services. It is clear that the economic model of mass production by many for mass consumption by many no longer holds, and in the future is likely to be 'unlimited production by a handful for consumption by whoever can afford it'. Hence his support for the idea of a universal income, which is now widely discussed, including recently on France Culture. I wholeheartedly agree with Paul Krugman that this is a very good guide to the state we are in - essential reading.

Climate Shock

Gernot Wagner and Martin L. Weitzman

Princeton University Press 2017, 250 pp., £18.95, p/b.

Following on the Stern report, this powerfully eloquent and informative book (50 pages of notes and 30 of bibliography) describes the economic consequences of a hotter planet. The challenge of climate change is uniquely global, long-term, irreversible and uncertain, and all the more unique in combining these four factors, which makes it so difficult to deal with. The authors ask why we do not consider the issue in terms of insurance and risk management, exercising the precautionary principle as in other fields. They provide a useful analysis of the role of free drivers and free riders (which we all are in a way), then also of the relative roles of sins of commission and omission. It is staggering that worldwide subsidies of fossil fuels still amount to \$500 billion annually when we actually need a carbon tax of about \$40/ton to discourage carbon emissions and reduce them radically. None of our existing measures are remotely adequate, and there is at least a 10% chance of a catastrophic rise of 6C, which we prefer to ignore. The eruption of Mt Pinatubo provides the background for a discussion of the potential role of rogue geoengineering as a risky technical fix made all the more likely the longer we postpone the necessary action that is currently viewed as politically and economically impossible. Another possibility that adds urgency to their case is the large-scale release of methane from Siberia or the Arctic and the role of positive feedback loops in accelerating the process. In spite of wake-up calls like this book it is probable that we will muddle through until there is a sufficiently major disaster then wring our hands for not having acted before – only huge pressure from below will change this situation but this is unlikely as we all get on with our everyday lives and hope for the best. *Mea culpa – et tu Brute?*

Water in Plain Sight

Judith D. Schwartz

St Martin's Press 2016, 250 pp., \$26.99, h/b.

This engaging and inspiring read is based on a number of case histories involving water innovators from around the world – people who are working with the water cycle to restore and enhance landscapes and maintain moisture in the soil. One of these is Allan Savory with his ideas on holistic management involving land stewardship and restoration. One of his key insights is that grassland and grazing animals have co-evolved, and a key element is plant litter keeping water in the soil so as to maintain not only the water, but also carbon and mineral cycles. As the author observes, 'when soil is left bare, water evaporates, carbon oxidises and microorganisms die. The ground becomes a hot plate and can no longer sustain life. Water runs off the land instead of sinking into it.' (p. 25) This represents water going sideways rather than up as evaporation, down into aquifers or being held in the soil (p. 42). The case studies in the book enable readers to realise not only the implications of an intensified water cycle and the benefits of slowing this down through vegetation and tree cover, but more generally the extent to which water influences climate.

All this makes one appreciate the importance of water infrastructure, and there is an extraordinary account of the importance of beavers in this respect as 'keystone ecosystem engineers' – unfortunately the numbers have decreased from 200 to 10 million, but scientists are now realising what an important role they play. As we know, irrigation plays a major role in farming today, yet it is also drawing down deep aquifers. Moreover, the minerals in this water are important and irrigation methods are associated with nitrate run-off. The author gives an encouraging example of David Johnson using compost low in salinity and rich in microbial life to produce not only a staggering plant growth, but also an astounding 70% of the carbon produced by the plants is sent back into the soil. Rather than compromising ecological integrity in order to feed the world – a depressingly frequent refrain – we learn that 'the synergies between plants and soil microbial communities

in advanced, highly fertile soil allow for the capture of the equivalent of a year's anthropogenic CO₂ emissions on less than 11% of the world's cropland.' This is a simple matter of allying with plant-soil-microbe dynamics to make the most of sunlight, water and nutrients, i.e. maximising photosynthesis. As many other thinkers are also arguing, we need much more integrated thinking with an overall goal not just of sustainability, but of restoration based on the insight that 'climate change, biodiversity loss and desertification are all facets of the same problem: that the world's carbon, water and energy cycles are out of whack.' (p. 217)

The New Ecology

Oswald J. Schmitz

Princeton University Press 2017, 236 pp., \$35, h/b.

The author of this important book about rethinking ecology for the Anthropocene is professor of population and community ecology at Yale. One of the significant underlying themes is how we can overcome the human/nature divide and the very different values of the ecocentric conservationist and the anthropocentric mining company. This suggests a model of socio-ecological systems thinking based on insights from community and ecosystem ecology as ways of addressing anthropogenic imbalance and restoring ecological health and resilience. This makes us not so much managers as thoughtful stewards aware of our embeddedness in natural ecosystems and of its ethical implications. On a personal level, this means individual citizens taking responsibility for their actions and their effects on the local environment – every food choice has its implications. There are many interesting illustrations, for instance the history of the collapse of the Newfoundland fisheries. Here, cod were the top predator, but they were embedded in a complex food web with top-down and bottom-up controls and feedback as well as different lengths of life cycles within a nested hierarchy. It is a commonplace that we are dependent on ecosystem services, but it is important for us to generate what the author calls a 'safe operating space' to maintain this, including 'biodiversity, atmospheric greenhouse gas concentrations, ocean acidity, nitrogen and phosphorus inputs for agricultural production, land use change, and fresh water.' (p. 154) Following the pioneering work of Aldo Leopold, the author also advocates restoration ecology enhancing natural processes in the light of new scientific understanding. This applies to both industrial and urban ecosystems. All this is encouraging, but only if we seriously engage with the tight coupling between ecology and economy instead of single-mindedly pursuing economic growth.

The Power of Networks

Christopher G. Brinton and Mung Chiang

Princeton University Press 2017, 310 pp., £24.95, h/b.

This rather technical book outlines six principles that connect our lives in terms of the power of networks: sharing, ranking, the wisdom and on wisdom of crowds, divide and conquer, and end to end. There are also interviews with some leading industry thinkers. Certainly, the general reader can appreciate some important points about sharing access and methods of ranking in relation to the wisdom or unwisdom of crowds. Aggregate rankings are pretty reliable, but some influential people may exert undue influence on opinion. In this respect, a discussion of Wikipedia might have been interesting. More generally, the reader gains a good understanding of the role of positive and negative feedback as well as positive and negative network effects as well as the value of opinion aggregation if people are unbiased and independent.

Money Matters – but so does Trust

Pietro Archiati

Temple Lodge 2016, 125 pp., £12.99, p/b.

Rudolf Steiner's lectures on economics and money are not very well-known, but he made some important points in formulating an economy based on human value rather than money. This is based on a seminar given in 1999, but is especially relevant

since the financial crisis of 2008 - the author sees our current situation as a crisis of materialism when we should be focusing on the joy of being actively busy and actualising our unique potential and contribution. This is one of the reasons why Steiner recommended work to be separated from income and for everyone to have the opportunity of using their talents. The reader is invited to consider their own deeper goals in relation to their inner being or spirit, and think in terms of making a transition from the age of the machine to the age of the human being where we have more opportunities to develop our spiritual capacity.

DEATH AND DYING

The Twilight Years

Almu Bockenmuhl

Temple Lodge 2016 (1991), 65 pp., £8.99, p/b.

These moving reflections were written after the death of the author's mother at the age of nearly 90 and after caring for her over a four-year period. She suggests that the trajectory of life is from earthly to spiritual, from caterpillar to butterfly and that the process of dying extends over the whole second half of life. Interestingly, she quotes Mihaili Mihailov, who was the political prisoner of the article in the last issue in terms of death as liberating from physical dependence (the body as prison) and the adversity of existence; this involves letting go and giving up self-will. She also draws on the work of Rudolf Steiner and Rilke who referred to the spiritualising of physical substance. The life review process involves a purging and purification, as suggested by the philosopher Schelling and described by Paul Robertson in his book *Soundscapes* reviewed in the last issue. It is here that we also need protection even as we are exposed to the reality of our own motives.

GENERAL

The Culture of Growth

Joel Mokyr

Princeton University Press 2017, 403 pp., \$35, h/b.

This brilliant, erudite and ground breaking study asks the question why innovations in Europe in the late 18th century triggered the Industrial Revolution. The author focuses on the period 1500 to 1700, with detailed comparisons with the contemporary situation in China. What he calls coercion bias generally serves to maintain the status quo. He argues that culture - defined as the beliefs, values and preferences in society that are capable of changing behaviour - was the decisive factor in overcoming the inertia of intellectual and political conservatism. It is clear throughout the book that this movement involves a small elite - the Republic of Letters - increasingly interconnected with the emergence of postal services and grounded in a common knowledge of Latin. The environment was both politically fragmented and intellectually supportive of a competitive market of ideas in an ethos of tolerance and rights encouraging innovation and creativity. The focus is on useful knowledge that can be used to enhance human well-being and based on a new understanding of the relationship between humans and nature articulated by Francis Bacon and Newton as cultural entrepreneurs.

It was during this period that ideology of optimism and progress emerged, whereby the future becomes more desirable than the past. The accumulation of knowledge is more systematic, especially with the emergence of scientific academies, journals and the diffusion of knowledge through encyclopaedias; the process also became more rigorous and reliable. Early world voyages expanded western horizons as well as creating trade and bringing new products to Europe. Puritanism and the empirical philosophy of Locke also played a significant role in England but the critical factor is the overcoming of conservatism by innovators instead of

the retrenchment found elsewhere. It is also important to remember how the Enlightenment brought together scientists, thinkers and entrepreneurs, for instance in Scotland. Readers come away from this book with a hugely enhanced understanding of the central cultural processes operating in Europe in the period leading up to the Enlightenment and Industrial Revolution.

Metamorphosis – Journeys through Transformation of Form

Edited by Gertraud Goodwin (foreword by Philip Kilner SMN)

Temple Lodge 2016, 160 pp, £22.50, large format p/b.

Some readers will be aware of the work done by Goethe and Steiner on metamorphosis and transformation, in the first instance applied to plants and then to life forms more generally. In this inspirational work, sculptor Gertraud Goodwin joins other artists and scientists in this exploration of form, beginning with the platonic solids and considering as well as illustrating many aspects of metamorphosis. In this respect, the sequences of images are crucial and sometimes very moving as one reflects on the cycle between egg or seed and the fully formed organism. I was particularly struck by Canto De La Vida on page 57, where one's eye is drawn across the page and back again at the four stages. Another fascinating dynamic is the unfolding into space followed by the enfolding of space within the form, corresponding to evolution and involution, expansion and contraction. Throughout the book, images complement the written word and give the reader a clear feel for the process. Anyone interested in metamorphosis should certainly read this book.

Success and Luck

Robert H. Frank

Princeton 2017, 187 pp., \$26.95, h/b.

The subtitle of 'good fortune and the myth of meritocracy' conveys the substance of the argument in this stimulating book. Perhaps the most dramatic example in the author's life, although there are others, is his sudden cardiac arrest while playing tennis and the fact that ambulance came so quickly when the average was around 15 minutes. The author arguably creates too great a dichotomy between success and luck in order to make the important point that talented and hard-working people do not always succeed and that advantages or disadvantages of birth may be decisive. What is missing is the dynamic between inner and outer represented by synchronicity and also illustrated in Pasteur's maxim that chance favours the prepared mind - we have to be in a position to take advantage of opportunities. The author shows how winner-takes-all markets magnify the role of luck and that the biggest winners are almost always lucky, like Bill Gates. Successful people will be inclined to attribute more of their success to hard work and talent than luck, which may be a misapprehension and a rationalisation that they deserve the large amount of money associated with their success. The author reports on a fascinating experiment where the emphasis of a success narrative is subtly shifted by a final paragraph stressing either hard work or luck - students are more likely to think the author kind and friendly if they admit the role of luck. Curiously, the author also makes an interesting case for a progressive consumption rather than income tax, which is only tangentially related to the main theme of the book through inequality. In any event, it makes for an engaging reflection.

The Meaning of the Library

Edited by Alice Crawford

Princeton University Press 2017, 299 pp., \$19.95, p/b.

This fascinating volume traces the history of the library through time, the library in imagination, and the library now and in future. It begins with Greeks and Romans (notably the story of Alexandria), moving onto the role of the library in mediaeval culture as a vehicle of spirituality to foster wisdom and holiness. There is an interesting table showing

the number of books published between 1450 and 1600 in Europe, with Germany in the lead and a total of just over 345,000 fairly evenly divided between vernacular and scholarly. Andrew Pettigree covers the mediaeval period, which includes the development of University libraries in Oxford and Cambridge. Some libraries were plundered or destroyed, and there is an interesting example from Heidelberg, where 3,000 manuscripts and 12,000 books were sequestered by the Catholic army and taken over the Alps on mules to the Vatican library.

The Enlightenment sees the rise of the subscription library, while the modern library is said to rest on four pillars: curation, engagement with research and learning, publishing, and creating and managing spaces devoted to users and collections. The final essay by the Librarian of Congress, James Billington, would be worth the price of the whole volume. It begins by characterising the statues from an ancient library in Ephesus representing Wisdom, Character, Judgement and Specialised Knowledge. The Library of Congress has its origins in the collection of Jefferson and now consists of 158 million items. For Billington, the library is a resource for knowledge-based democracy when differing opinions sit alongside each other. He laments the human loss of memory, community and language in the digital age where sentences are being obliterated in online chat rooms and the richness of language 'is replaced by a mushy melange of abbreviations, acronyms and the universalised pidgin English of air-traffic controllers and computer programmers.' Billington reminds us that reading a book can become a private conversation with someone at a time and place other than our own and that libraries are antidotes to fanaticism and temples of pluralism. His parting advice is that 'reading can balance our noisy, hurry-up, present-minded world with what Keats called "silence and slow time". Whatever else you do in life, do not fail to experience the simple pleasure of being alone with a good book on a rainy day.'

Montaigne – A Life

Philippe Desan

Princeton 2017, 796 pp., \$39.95, h/b.

Not only is this the definitive biography of the 16th century French essayist, but it also firmly places the essays within the political and social context of the day. Desan shows that the detached and universal Montaigne represents only the last four years of his life, when he had no more political ambitions and had retired to his estate. The essays went through four editions in 1580, 1582, 1588 and the posthumous edition of 1594. I had not appreciated the extent of Montaigne's political and courtly involvement - he was elected Mayor of Bordeaux while on a trip to Italy. For him, writing was a complement to his main political activity, and the slant of the essays in their various editions reflects this. The last phase of Montaigne is the principal source of our image of him, but Desan situates this within the totality of his life journey and shows how this retreat became a necessity - his health was also not so good. The very well written narrative carries the reader along through the history of France and Europe at that time and allows us to appreciate Montaigne within this much wider context where politics and literature are intrinsically linked.

Voltaire

Nicholas Crook

Oxford 2017, 151 pp., £7.99, p/b.

While at St Andrews during the 1970s, Voltaire was one of my set authors, and I wrote an essay on him and Bertrand Russell for the Edinburgh Speculative Society in 1979. This excellent and engaging overview portrays Voltaire as the most media savvy writer of his age who, like Goethe, achieved European fame at the early age of 24. His output as a poet, dramatist and writer was prodigious by any standard. The author begins with theatre, showing how Voltaire was essentially a performer, whether on or off stage. I had not realised that he performed in many of his own plays. His acerbic wit or corrosive ridicule was always getting him into trouble, and his trip to England was precipitated by one such incident. It proved to be hugely important, as he became the spokesman not only for a more tolerant society, but also for the ideas of Newton - it was very interesting to learn that he was elected a Fellow of the Royal Society in 1743, largely for his account of Newton's work.

In his own time, he was famous as a campaigner, perhaps most so in the Calas affair, a good example of the dogmatism and fanaticism that he relentlessly opposed. He knew how to engage public opinion and shape it. Sometimes, he even denied authorship of some of his work, but his style was unmistakable. His best-known work, *Candide*, appeared in 17 editions in its first year of publication, including three different English translations. The author remarks that *Candide* was subject to 'a crash course in evil and human cruelty', staggering from battlefield to earthquake. Part of his output and influence stems from around 16,000 letters - his complete works are some 200 volumes in the new Oxford edition. I agree with the author that his legacy is most in terms of his voice, 'a tool for debunking self-important authority with scepticism and irony' - little of his work is still read. As well as a masterly summary of Voltaire's life, the reader gains a much better understanding of 18th-century France and Europe.

Portals of Discovery

Lord George Norrie

The Book Guild 2016, 227 pp., £14.95, h/b.

George Norrie has led a very interesting and full life as a soldier, horticulturalist, entrepreneur and parliamentarian specialising in environmental issues prior to just missing out on being one of the 90 elected peers to remain in the Lords. His environmental work in the House accounts for the foreword by Sir Chris Bonington and the preface by Dame Fiona Reynolds. He gives an interesting insight into procedures in the Upper House, with a spice of amusing and sometimes - for him - embarrassing anecdotes. His father had been a distinguished soldier and subsequently Governor General of South Australia then New Zealand, and George writes very informatively about his life and the remarkable qualities of his father - big boots to fill, as he remarks. Leaving the Lords was a terrific wrench and one comes to appreciate through George the amount of dedicated work done by many hereditary peers. Since then, he has had his fair share of life challenges, but also found a new life and orientation with his wife Annie, not only in restoring a derelict farmhouse near Dumfries but also making more time for spiritual contemplation.

If one has no time, one has also lost oneself. Distracted by the obligations of everyday activities, we are no longer aware of ourselves... Everything is done all at once, faster and faster, yet no personal balance or meaning can be found. This implies the loss of contact with one's own self. We also no longer feel "at home" with ourselves and find it difficult to persist in any given activity because we are available at every moment.

The First Dazzling Chill of Winter – Collected Stories

Nicholas Hagger (SMN)

O Books 2016, 417 pp., £20.99, p/b.

Life Cycle and Other New Poems 2006-2016

O Books 2016, 377 pp., £20.99, p/b.

These volumes form part of Nicholas Hagger's prodigious output of 40 books, including 2,000 poems and 1,200 stories. The most recent collection contains 201 stories, and, as the title suggests, evokes the chill of winter or impending old age through the eyes of Philip Rawley. As Nicholas remarks, the observational powers of the poet and writer are far more developed, so that he sees more everyday events. Many of the stories are very short with vivid dialogue between the characters, while some evoke memories of chance encounters. The theme of old age and death recurs in different contexts, as does Nicholas' perennial search for unity and quest for wisdom. The title 'Life Cycle' reflects path and pattern in our lives in terms of 12 seven-year ages, and this collection contains three volumes with different focuses – 'In Harmony with the Universe', 'An Unsung Laureate' concerned with public events such as Margaret Thatcher's funeral and 'Adventures in Paradise' depicting journeys to remote places. Nicholas is inspired by the 17th-century metaphysical poets and the reconciliation between inner and outer aspects of life. Here is one evocative example:

River, Headlong

*How fast the river flows,
Rushing through stones, an urge
Headlong in movement's flux,
Relentless, restless surge.*

*And where did my life go
Rushing headlong, doing?
Where was there time to be,
Still as a stone, musing?*

*I sit, still as a stone,
As the torrent froths by.
All lives rush to their end,
Both man's and moth's – oh, why?*

There is No Such Thing as Nothing

Peter Scarisbrick (SMN)

Self published 2016, 290 pp., no price given, p/b.

This work about our place in the universe is the result of 50 years of research and five years' work. It is a challenging book to review at the interface between science and metaphysics in the sense that it introduces new concepts purporting to explain puzzles in modern thinking while at the same time having a mathematical basis set out in the second part. The author proposes the new idea of 'extension cells' as cells or clusters of cells made out of the quantum stretches of the universal quantum field. These stretches mean that the universe itself is an extension cell of infinite size. This view contrasts with the current particle-space universe whereby extension replaces distance in space. The paradigm is based on six axioms including that a quantum awareness field gives rise to cellular awareness which, when complexified, becomes consciousness. Emergence, aliveness and interconnectedness are key features, also giving rise to his ethical view based on a polarity between love and fear. Readers are taken on an adventure of ideas, and will need a reasonable grasp of physics and mathematics in order to do the book justice, although it is sometimes the case that more general points are stated rather than argued for, so every reader will have their own take.

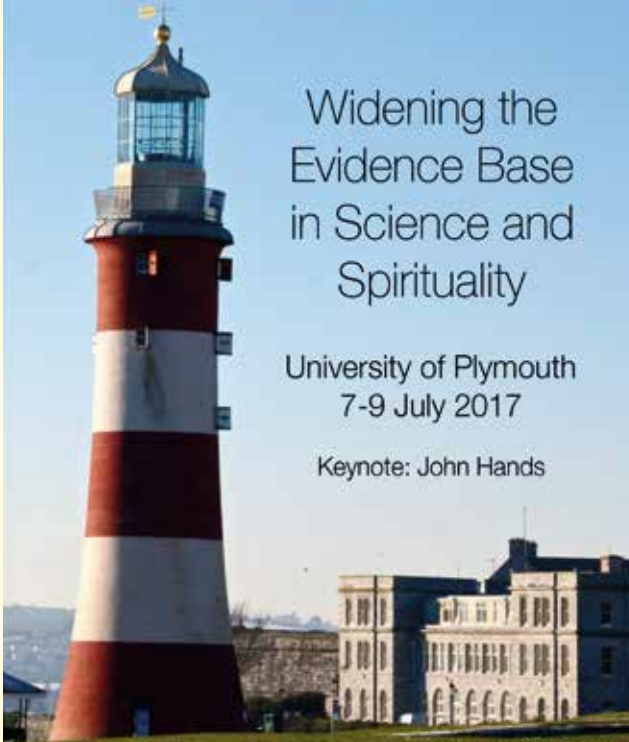
Charles Swindoll, a Texan pastor and founder of the Insight for Living radio broadcast finds himself caught in the undertow of too many commitments and too few days. He found himself snapping at his wife and children, and feeling irritated at unexpected interruptions through the day. 'Before long, things around our house started reflecting the pattern of my 'hurry-up style'. It was becoming unbearable... our younger daughter Colleen wanted to tell me about something important that had happened to her at school that day. She hurriedly began "Daddy, I want to tell you something and I'll tell you really fast." Suddenly realising her frustration, I answered "Honey, you can tell me... and you don't have to tell me really fast, say it slowly." I'll never forget her answer:

"Then listen slowly!"



SCIENTIFIC AND MEDICAL NETWORK - Annual Gathering 2017


*Let the mind be enlarged... to the grandeur of the mysteries, and
not the mysteries contracted to the narrowness of the mind.
- Sir Francis Bacon*



Widening the Evidence Base in Science and Spirituality

University of Plymouth
7-9 July 2017

Keynote: John Hands

 The Scientific and
Medical Network

Chairs: Dr. Peter Fenwick
David Lorimer

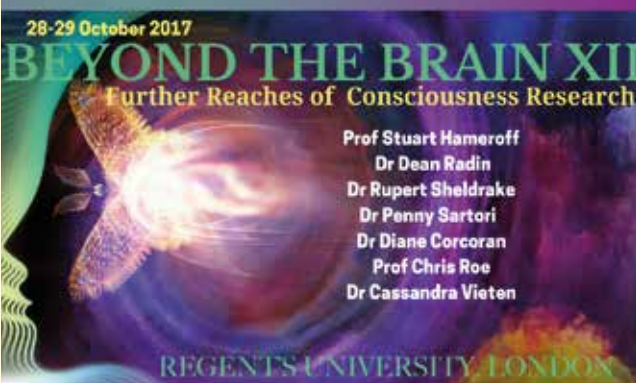
THE SCIENTIFIC AND MEDICAL NETWORK
with
The Institute of Noetic Sciences
The Parapsychological Association
International Association for Near Death Studies
Center for Consciousness Studies, University of Arizona

28-29 October 2017

BEYOND THE BRAIN XII


Further Reaches of Consciousness Research

Prof Stuart Hameroff
Dr Dean Radin
Dr Rupert Sheldrake
Dr Penny Sartori
Dr Diane Corcoran
Prof Chris Roe
Dr Cassandra Vieten



REGENTS UNIVERSITY LONDON


*"I regard consciousness as fundamental, matter is derivative from
consciousness. We cannot get behind consciousness. Everything that we talk
about, everything that we regard as existing, postulates consciousness."*
- Max Planck

 The Scientific and
Medical Network


www.scimednet.org

BOHM-PRIGOGINE CENTENARY CONFERENCE

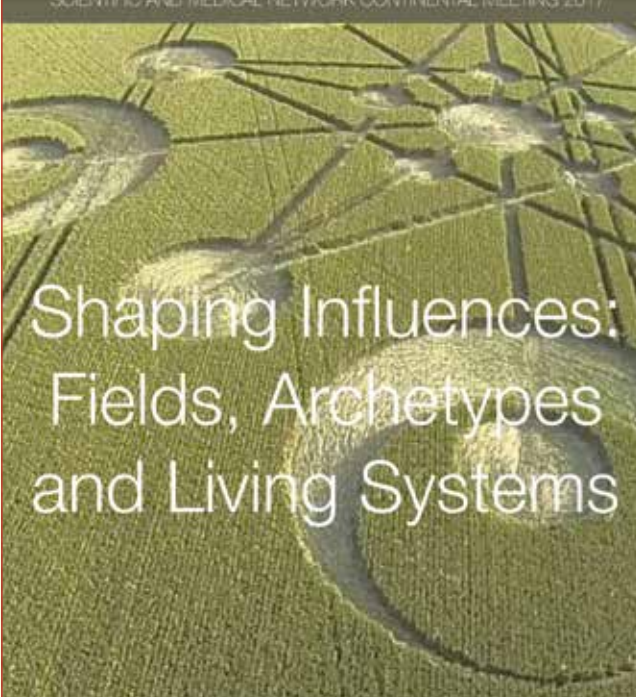
Complexity and the Implicate Order



Saturday 24th June 2017
Christopher Ingold Building XLG2, UCL,
Gower St. London, WC1E 6BT
Chaired by Bernard Carr and David Lorimer


 The Scientific and
Medical Network

SCIENTIFIC AND MEDICAL NETWORK CONTINENTAL MEETING 2017



Shaping Influences: Fields, Archetypes and Living Systems

Thursday 7th September - Monday 11th September 2017
Sichów House and Library, Poland

 The Scientific and
Medical Network

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.
- provide a safe forum for the critical and open minded discussion of ideas that go beyond reductionist science.
- integrate intuitive insights with rational analysis.
- encourage a respect for Earth and Community which emphasises a spiritual and holistic approach.

In asking searching questions about the nature of life and the role of the human being, the Network is:

- Open to new observations and insights;
- Rigorous in evaluating evidence and ideas;
- Responsible in maintaining the highest scientific and ethical standards;
- Sensitive to a plurality of viewpoints

Network services

- Network Review, published three times a year
- Monthly e-newsletter for members with email
- Promotion of contacts between leading thinkers in our fields of interest
- A blog discussing current and controversial topics and science, medicine and spirituality (<http://scimednet.blogspot.com>)
- A website with a special area for Members including discussion groups
- Regional groups which organise local meetings
- Downloadable MP3s from our conferences

Network Conferences

The Network's annual programme of events includes:

- Three annual residential conferences (The Annual Gathering, Mystics and Scientists and Beyond the Brain alternating with The Body and Beyond)
- Annual residential conference in a Continental European country
- An open day of dialogues on a topical subject
- Evening lectures and specialist seminars
- Special Interest Group meetings on themes related to science, consciousness and spiritual traditions
- Student concessionary rates and some bursaries available

Joining the Network

Membership of the Network is open to anyone who wishes to explore some of the most difficult questions of our time in concert with a community of like minds. Student members must be studying towards a first degree engaged in full-time study.

Subscription Rates

Membership of the Networks costs £30 (£60 with printed Review). Please contact the office for further details.
£36 electronic and undergraduate student membership free.

Membership Applications

To request a membership application form, please contact:

**The Network Manager,
The Scientific and Medical Network,
151 Talgarth Road,
London W14 9DA, England
Tel: +44 (0) 203 468 2034**

Email: info@scimednet.org

www.scimednet.org