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, including 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 cavil: 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 Abbaci* 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!). The 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 Schaef

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 clairiscience. 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 and enemy that justifies nuclear build-up and even a pre-emptive first strike. This Manichaean 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 above 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 Presss 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.

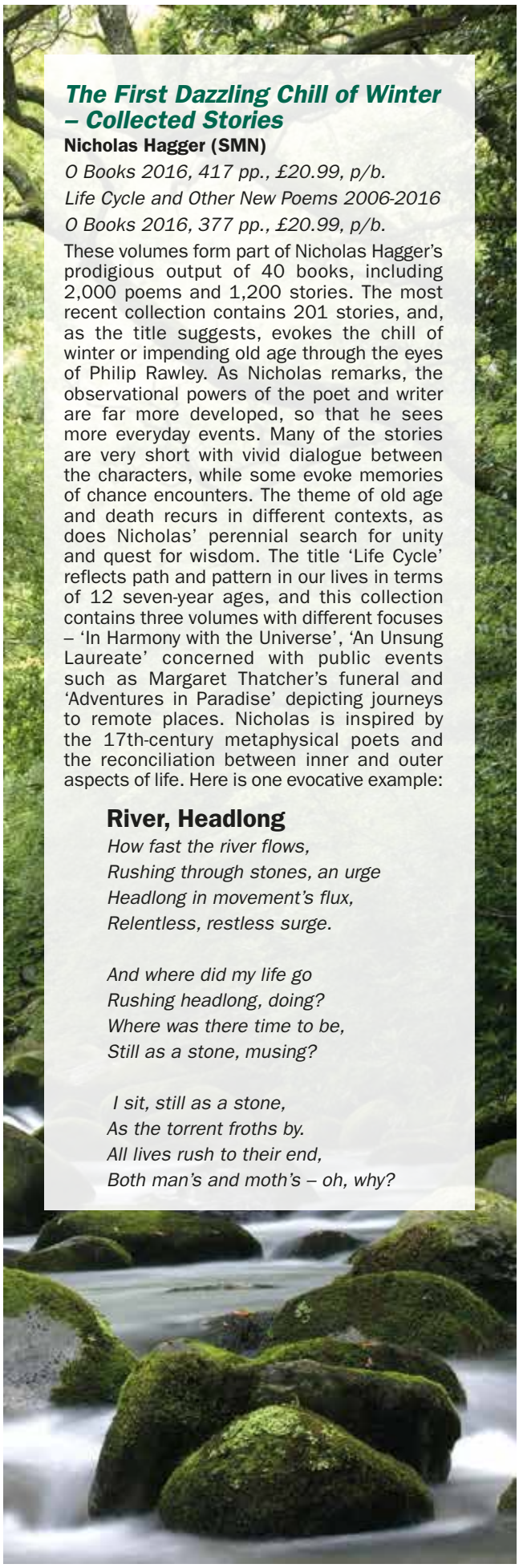
Portals of Discovery

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!"