So do we have to accept an inexorable technological future? David proposes an act of creative reconstruction with a dramatic retrenchment of the contemporary technosphere, a substantial global population reduction, and the restoration of a majority of the Earth's land to true wilderness. He sees this as the only path to a long-term sustainable future, although he is not optimistic that we will follow through on his proposal. Against this, we are assured that technology is not the problem, it is the solution, and that we must relentlessly continue to advance our technical capabilities. In David's view, this will expose us and the entire planet to increasing peril: rapidly advancing technology will be combined with rapidly declining quality of life. This radical outlook certainly gives pause for thought and encourages readers to take a more critical stance towards technology and its alluring promises.

The Real Dream

David Lorimer

THE COLLAPSE OF MATERIALISM

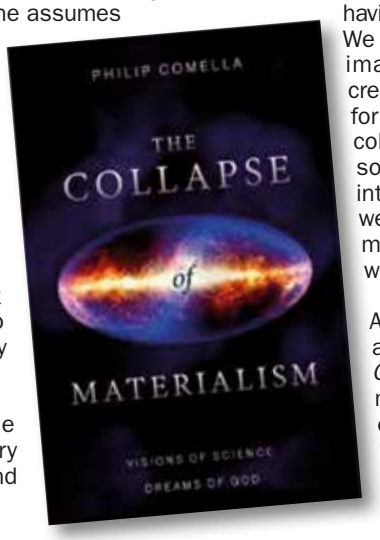
Philip Comella

Rainbow Ridge Books, 2014, 379 pp., $19.95, p/b – ISBN 978-1-937907-21-1

The ideology of scientific materialism not only dominates science, but has far-reaching implications for society as well. Yet, since the 1930s, leading physicists have asserted the primacy of mind and consciousness, while our understanding of matter itself has been totally transformed. In this well argued book, lawyer Philip Comella issues a fundamental challenge to this dominant worldview by asserting that the assumption of a mind independent world is flawed, as also proposed in Bernardo Kastrup's *Brief Peaks Beyond* reviewed in No 118, p. 52. Instead, he proposes a universal mind: we are the one mind, and we are dreaming the world. From a philosophical point of view, the interesting implication of this view is that it overcomes the charge of solipsism always levelled against traditional forms of idealism. The postulate of a shared universal mind can explain why we project and perceive the same reality.

Materialism assumes that our essence is a body rather than a mind, but our immediate experience is as a conscious creative mind that also has the capacity to dream. Hence Comella's proposal that both our dreams and everyday experience share a single source, the mind. Sir James Jeans is famous for his remark that the world is beginning to look more like a great thought than a great machine, and here he is quoted as saying that 'creations of an individual mind may reasonably be called less substantial than creations of a universal mind', although arguably the same process is involved. Interestingly, this is exactly the proposal of Walter Russell in his many books (the author does not seem to be aware of his work), that we live in a creating rather than a creative world and that the process of creating through mind desire is identical in both the universal and individual minds. We can understand this through our own experience of planning events or imagining and materialising or works of art. The power of mind is suggested not only through dreaming, but also through hallucinations, synchronicity, psychokinesis and the placebo effect. Comella quotes a fascinating experience of Goethe when he saw himself coming towards himself on a horse in an unfamiliar suit only to find himself on the same path eight years later wearing the suit he had seen. The mind has the capacity to conjure up multiple possibilities, only one of which will actually happen.

In relation to science, Comella's central and extremely significant point is that by postulating a mind independent world, 'physical reality left itself has no mind, no purpose, and no means to organise itself into the mathematical harmonies that constitute nature.' (p. 79) This obliges scientists to come up with theories to explain how a hypothetically independent world created itself from nothing. This creates a paradox: 'material science separates mind from matter, but then proceeds to catalogue the laws by which this mindless matter organised itself to the limit of mathematical order. Matter is dumb but the laws of nature are brilliant.' Comella's theory is that 'the mind of God is the origin of both the material world and the scientific theories that seek to explain the world's operation.' (p. 79) Without the mind of God, the minds of scientists have to provide theories consistent with their assumptions, which, in the case of multiverses and many worlds theory, violate the law of parsimony in a desperate attempt to avoid postulating a universal mind. As the author points out, matter organising itself into the symmetries of nature leads to a fine tuning problem and ultimately either to the multiverse or an intelligent force in the cosmos, which the premise of scientific materialism already excludes. Moreover, if one assumes that both matter and the laws of nature are given, then there is no need to explain what has been assumed. This all leads Comella to the conclusion that 'we must rise beyond the misperception that the physical world has an existence independent of the mind in order to achieve a unified theory of the cosmos. (p. 142)



He then examines the implications of his theory for quantum physics and evolutionary biology. Quantum theory points in the direction of the primacy of mind and consciousness, but as yet has not arrived at the idea that it is our own united mind that is projecting reality. There is still a tendency to think in terms of individual minds. For Comella, 'only the mind can weave this dream into the interlocking, mathematically precise patterns we see out in the world.' (p. 173) It is the mind that imposes the order before the theorising begins and scientists themselves are part of this continual creative process.

Next, Comella applies these ideas to the key elements of Darwinian evolutionary biology. Natural selection is by definition a mindless process, but he argues that the second step in the argument is simply a statement of a certain set of conditions (not an ordering mechanism) after the production of variety. Here he could have enhanced his analysis by including the work of Lovelock and Margulis that postulates a co-evolutionary process between organism and environment through a complex feedback process. In other words, it is not simply the environment imposing conditions on a passive organism. Once again, evolutionary biology provides its own mind component through theorising - Ernst Mayr was uneasy about the use of the word selection as implying any kind of intelligence. In addition, much theorising, including by Richard Dawkins, is a thought experiment working backwards from the outcome or result to postulate a plausible mindless mechanism.

The last part explores the implications of the one shared universal mind hypothesis for our collective future. To the extent that a critical number of us arrive at this insight, the future will be transformed to one of peace and brotherhood. Comella is optimistic about this prospect on the basis of his conviction that we do indeed share one mind and so have the inherent capacity to realise this. Interestingly, Walter Russell reaches an identical conclusion, citing as a fundamental misconception that human bodies have separate minds and souls instead of the One-Mind Soul having innumerable bodies. We have the collective imaginative power to create a future that works for all of us but we must collectively choose to do so in order to dream it into existence. After all, we have dreamed and manifested our existing world in the same way.

As Larry Dossey also argues in his book *One Mind*, there are many pointers to the explanatory power of this idea, which was also developed by

the New Thought movement over a hundred years ago. The best chance of a breakthrough in the direction that Comella suggests is most likely to emerge from a combination of physics and parapsychology rather than biology or philosophy. Even though common sense and science make naive realism seem plausible, the careful thought put into this probing book will make readers think again.

medicine-health

The Neural Correlates of the Heart

Judith Asphar

INTO THE MAGIC SHOP — A Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart

James R. Doty MD.

Avery, New York, 2016, 288 pp., $26, h/b - ISBN: 978-1-59463-298-3 (p/b Feb 17)

Part memoir, part confessional, part teaching of mindfulness, **Into the Magic Shop** is a paradoxical story of our times. A childhood shaped by an alcoholic father and severely depressed suicidal mother -- understandably resulting in truancy, violence, and failed grades – nevertheless magically morphed into the future James Doty, MD, FACS, FICS, FAANS.

The thirteen chapters of this highly-praised volume are divided into three parts, making an inspiring read. It does however, begin by describing in some detail the "excruciatingly difficult" removal of a malignant tumor-- a medulloblastoma – from the brain of a four-year-old boy. "There's a certain sound the scalp makes when it's being ripped off a skull—like a large piece of Velcro tearing away from its source." Touchingly, and tellingly, he adds, "when the brain is exposed you can see it move in rhythm with every heartbeat." To study those very neural correlates of the heart, in 2005 Jim Doty established CCARE —The Center for Compassion and Altruism Research and Education at Stanford — of which he is the Director

Thanks to a serendipitously "disruptive" meeting when he was twelve years old, Jim was spared from family patterns that most likely would have resulted from an unsafe and unpredictable childhood. Doubtless to help escape the shame and humiliation of extreme poverty, he describes being drawn to the lure of magic from an early age. The fatefully life-changing moment manifested when – as a scared and lonely boy on his bicycle – searching for a particular magic shop in a run-down strip mall, he came upon a woman whose name was Ruth. Her influence is the warp and weft of his story. An avatar for him, Ruth's prescience identified Jim's potential and ended up indelibly shaping his world.

To be sure readers don't gloss over pivotal lessons learned from his faithful daily visits to the magic shop, four early chapters are set off by gray-colored pages that highlight "Ruth's Tricks." They wrap up the first part of the book with: Breath and Relaxation; Taming the Mind; Opening the Heart; and Clarifying Your Intent. Although early on Jim conscientiously followed "Ruth's Magic," it cast no spell on his early plight which remained a challenge throughout his school and college training years. Gradually extricating himself by incorporating Ruth's tools of visualization, intention, and attention, his lowly beginnings were to evolve into dreams of becoming a doctor and earning a million dollars – along with the accompanying Rolex, Porsche, and mansion.

Acceptance at UC Irvine in LA, and Tulane University Medical School in New Orleans was followed by a neurosurgery residency and nine years at Walter Reed, the National Military Medical Center in Bethesda, MD. Not all smooth sailing, though; one night proved particularly fateful. After grueling hospital rounds – at a time when he'd abandoned his mindfulness practice for alcohol, cocaine, and half-naked women – he was kicked out of a strip-club with a car-load of fellow residents. Piled into an old Ford, they crashed headlong into a tree, totaling the vehicle and almost themselves in the process. Close to bleeding to death from abdominal injuries, the doctor became a patient. Watching the surgery from above his body, he was moved through unforgettable blackness to the tell-tale, split-second, slow-motion, illuminated biography -- drawn ever deeper into the pure white light of Love. Brought back to life by a pin-prick to his foot, he had experienced first-hand the total acceptance of an NDE — a near-death experience. What did die that night, he recounts, was his belief that Ruth's magic made him invincible. By his own admission, he still had to learn that the arrogant, egotistical neurosurgeon he would become, had many more years of costly mistakes ahead.

Fast forward to age forty-four and by Chapter 9 —he is a neurosurgeon, at Stanford, a multi-millionaire, married, then divorced and facing failure as a father. Owner of a villa in Florence, a private island in New Zealand, and living alone in his 7,500 square-foot home overlooking the Pacific Ocean – with Porsche, Range-Rover, Ferrari, BMW, and Mercedes too. Hooked by the speed of Silicon Valley start-ups, his one-night-stands with nameless women were punctuated through the wee-small hours by checking the markets and watching his fortune fluctuate. Unimpeded by having no background in business, "one of the most successful neurosurgeons in Orange County" — who had incidentally invented a brain monitoring electrode – had won and lost tens of millions. His rescue of Accuray — a cutting-edge radiation oncology company — embroiled him in the dot-com crash. Somehow, he regained enough wealth to fund his future philanthropy by understanding it would only bring happiness if given away.

Peppered with applicable definitions of brain functions as they became increasingly revealed and understood, occasional -- somewhat graphic -- descriptions of surgeries appear here and there. But, prompted by his own near-death experience, his reflections on the unified intelligence of the mind and the heart and love's greatest longings proved to be most meaningful for this entrepreneurial physician. Happily remarried, with a new family, and recommitted to his neurological work and research in both New Orleans and Stanford, Jim's deepening personal practice offers a further lesson. This one a mnemonic — CDEFGHIJKL — a reminder to start the day with powerful intention incorporating: Compassion; Dignity; Equanimity; Forgiveness; Gratitude; Humility; Integrity; Justice; Kindness and once again…Love.

Into the Magic Shop ends where it started, with the "way of doing what Ruth asked me to do, to teach her magic to others." Now through the eyes of a neuroscientist, the Doty definition of compassion as "an innate instinct" becomes the core mission of his field of influence. It grew most profoundly through a meeting -- and a now a close relationship -- with the Dalai Lama. After speaking at the School of Medicine, and deeply impressed by Jim's groundbreaking endeavor, His Holiness chose to make a substantial personal contribution to the establishment of Stanford's CCARE and its far-reaching research, courses, and certification programs.

Not least, in 2014 with CARE's Dr. Stewart Mercer in Glasgow and a collaborative event with the University of Edinburgh hosted at Stanford in March 2016, which *"will culminate in a distinguished panel addressing the cutting edge of compassion research involving artificial intelligence, machine learning, and robotics:*