Of *Aplysia* and apes

Philip Corr reviews an emerging biology of mind

Eric Kandel writes with verve and flair, reflecting a career-long immersion in psychiatry, psychology and neuroscience – culminating in his delineation of the neuronal basis of learning/memory for which he won a Nobel Prize in 2000.

The opening chapter of the book recounts his escape from Vienna as a young boy when Hitler invaded Austria. This had a major impact. It forced him to ask some fundamental questions: ‘How can one of the most advanced and cultured societies on earth turn its efforts so rapidly towards evil?’ and ‘How do individuals, when faced with a moral dilemma, make choices?’ Unlike many others at that time, Kandel searched for answers not in radical political and sociological theories but in ‘…trying to understand the inner workings of the brain and the motivation for human behaviour’ – his approach asked ‘questions that could be answered more definitively through scientific research’. Kandel also sought an answer to the clinically relevant question ‘Can a splintered self be healed through skilled human interaction?’ As the book illustrates, he ‘became a psychiatrist in the hope of understanding and acting on these difficult problems’.

The book moves on to important scientific backdrops: the pioneers in neurology and psychiatry who shaped the field; how neurons work; modern approaches to brain disorders; genetics; brain imaging; and animal models. The chapters that follow then survey a diverse range of disorders, revealing the (dys)functional aspects of the mind: autism, in relation to social and communicative behaviours; disordered emotion in depression and bipolar disorder, in relation to the integrity of the self; schizophrenia, in relation to decision making; memory and dementia; creativity/art and the brain; movement disorders, comprising Parkinson’s and Huntington’s diseases; conscious and unconscious emotion, especially how emotion guides choice behaviour; the addictions...
Consciousness – still a mystery?

The subject of consciousness has an enduring appeal. Regardless of the advances made in psychology on a variety of fronts, we seem to be forever hamstrung by the apparently unfathomable problem of just how conscious experience came to exist in a causally closed physical universe.

The response of Feinberg and Mallatt is to put forward an account of their theory of neurobiological naturalism in an effort to explain the ‘subjective–objective barrier’. In doing so, they perform some manoeuvres that will be recognisable to those familiar with the literature on consciousness. For example, human conscious experience is portrayed as having features in common with ‘primary consciousness’ or rudimentary sensation and affect. We are then presented with the claim that simple vertebrates (such as lampreys) possess primary consciousness. Whilst this claim may have merit (and some would argue that it does not), the shifting of the dividing line between conscious and non-conscious parts of the universe does not in itself close the explanatory gap. We are still left with the question of how the ‘something’ of subjective experience arises from the ‘nothing’ of an objective physical universe.

While appearing to lower the bar for what can be accepted as conscious experience, the authors insist that ‘life’ is one of the defining features of consciousness, which would seem to exclude the possibility of conscious machines. Perhaps the argument for this is sound, but the brevity of the discussion is such that limited attention is given to this and other key points.

The book is certainly concise. The authors complete their demystification of consciousness in 122 pages and in the remaining 77 pages of the book is a glossary which includes some items that may raise eyebrows: a reader who feels compelled to turn to the glossary for edification following an encounter with terms such as ‘attention’, ‘central nervous system’ and ‘synapse’ is surely ill-equipped to tackle the literature on consciousness.

Who, then, is the book aimed at? Serious scholars are likely to find their appetite whetted in an almost cruel fashion, and yet readers with a casual interest in consciousness may find the material just too narrowly focused. The book is a worthwhile read but the authors’ ideas deserve much more comprehensive discussion. It is difficult to shake off the feeling that those seeking such a discussion will need to locate a copy of the authors’ more substantial book, The Ancient Origins of Consciousness.

Reviewed by Andrew Hart, who is a Lecturer at the University of Bradford

Professor Philip J. Corr is at City, University of London, and is Founding Editor-in-Chief of Personality Neuroscience
A walkway to ‘wonkier’ people

Are we forged in the crucible of childhood? Is there a real you? Where does imagination come from? What’s the line between creativity and madness? Can we laugh in the face of death? These are a few of life’s big questions, and your shelves may be filled with books by psychologists seeking to provide some answers. But there are good reasons why you should find space for this one, offering a ‘comedian’s take’.

Stand-ups professionally examine our quirks on stage night after night, a cartoonish embodiment of all that it is to be human. In the words of Penn Jillette, ‘In show business you show what you’re feeling. So yes, they show the angst, but they’re showing the angst of humanity.’ Ince concludes from this that ‘perhaps it is only by noticing and drawing on the absurd and surreal that we can see the conflicts, incidents and coincidences that make all human beings such a curious and special species’.

Ince isn’t just any comedian. In his foreword, Stewart Lee – probably the master of dissecting the comedian’s art – hails Ince’s ‘subtly significant influence on the trajectory of the better parts of British stand-up over the last few decades’. Lee points to ‘the connections he made in large-scale shows between comedy and the world of politics, philosophy and science’. You can see why The Observer recently described Ince as a ‘becardiganed polymath’.

Wearing cardigans, along with knowing about stuff, doesn’t tend to endear a boy to his schoolmates. So Ince’s book begins with an autobiographical feel, his formative years feeling like a ‘freak’ and a ‘weirdo’. A car crash when he was two, in which his mother was seriously injured, sets up the stereotypical ‘creation story’ of the comedian. But the scientifically minded Ince veers away from this, drawing on Spike Milligan’s view that depressive episodes simply show up more in a comedian, ‘like a black ink stain on a white shirt or an archbishop on a tricycle’.

And who isn’t a weirdo, anyway? One of Ince’s main points is that comedians might ‘go out of their way to highlight their own absurdities, weaknesses and ridiculousness’, but perhaps we all should.

Ince’s anecdotes are a good advertisement for ‘living ridiculously, but also more kindly and helpfully’.

Along a journey that’s never dull – managing to have both real purpose and an ‘ooh look, a squirrel’ quality – Ince meets many of the best (and most entertaining) psychologists we have to offer. Sarah-Jayne Blakemore, Sophie Scott, Charles Fernyhough, Essi Viding, Dean Burnett and others take him under their wing and ruffle his hair… Ince has such an endearingly earnest air around him when he meets scientists, reflected in his general rule: ‘If a stranger approaches you and asks you if you’ll take part in a scientific experiment, say “yes”.’

Many of his conclusions won’t surprise an audience of psychologists – that ‘we are an amalgam’, that whatever your anxiety someone somewhere will share it, and that comedy can ‘very often be the best way to deal with life’. But in addition to being royally entertained I was also educated, including on young comedians identifying with being on the autistic spectrum, and a beautifully handled chapter on our personal fear of mortality.

In any case, I’m here for Ince and his creative peers. I’ll never tire of reading Alan Moore’s views on imagination, Noel Fielding on surrealism, Tim Minchin on taboo. We should be grateful that psychology has those psychologists we have to offer. Sarah-Jayne Blakemore, Sophie Scott, Dean Burnett, Charles Fernyhough, etc – are brilliant scientists but also very funny people in person. Was that important for the book, or a coincidence?

Ince is to be human. In the words of Penn Jillette, ‘In show business you show what you’re feeling. So yes, they show the angst, but they’re showing the angst of humanity.’
advice of others. My experience of science generally, and it may not be a usual one, is that researchers are gregarious when it comes to excitedly talking about their work. I find the green rooms of science festivals far more social than the green rooms of literature festivals.

There's an old idea that analysing a joke is like dissecting a frog – no one laughs and the frog dies. And yet in recent years, some of the best stuff I've read or listened to has been analysis of humour. I don't think I am dissecting jokes themselves so much as what the wish to turn our lives into punchlines and stories tells us about being human. There may be some discussion of why you want to tell a certain joke, but not why the joke itself ‘works’.

There has been a change in a section of stand-up comedy. With much of the post-war comedy, the comedian was wearing a mask on stage, they were using gags to maintain their ‘secret’. Now, there are an increasing number of comedians who are very revealing on stage; the connection they make with the audience is more than just the connection from a laugh…

I like that Stewart Lee called the book ‘Deceptively deep’. Is that something you cultivate or value in yourself as a person? I don’t think I am deep, I am just interested in a lot of things. In fact maybe I am broadly shallow, a wide puddle of interests that may evaporate all together on a sunny day. But my life is spent perpetually ruminating… I am more ‘what if’ than ‘it is’ and I hope the book is not a set of answers but a series of possibilities, some of which may be useful to others.

The book is in some ways a more interesting way of doing an autobiography. As an avid reader, what's your favourite 'psychobiography'?

In recent months I have found After Kathy Acker by Chris Krauss and You are Raoul Moat by Andrew Hankinson disconcerting and fascinating for quite different reasons.

After writing the book, did you feel you knew yourself better? Yes, it has led to me starting therapy and it has led to me discussing things from my past that have started to illuminate me. I find it odd to think that when I wrote it I was sheepish in thinking that being involved in a major car accident at the age of three, which I thought I had caused, and whose repercussions hung over the rest of all our childhoods, was something that I should be embarrassed to consider trauma. It doesn’t necessarily make things easier, but it does make some of it all more comprehensible, and that is useful.

There’s more than a hint of ’l'appel du vide’ (the call of the void) in your anecdotes and style of writing. Would you say that’s common to most comedians? The funniest thing I’ve heard Russell Brand say was about his internal monologue on waiting in line to meet the Queen… I had to look ’l'appel du vide’ up, but now I have, I think there is, at least among the sort of comics I hang out with.

A fly-eating frog has a limited number of choices: we have the imagination to consider all the possibilities and undoubtedly they will include many that would bring shame or a murder rap upon us.

What lesson from the life of a comedian would you hope the average reader takes from the book? I hope it reminds people that we are absurd and that however steadfast the person in front of you appears, you have no idea what is actually going on in their mind… the disparity between our outward appearance and the life in the mind may be considerable.
You dedicate the book to a friend who ‘died giving her life to humanitarian aid work’. Sadly, this friend became fatally ill due to the work she was committed to. Her story was definitely part of the motivation for writing this book. I often experience emergency first responders and humanitarian aid workers sacrificing their own self-care for the greater cause. I have supported thousands of individuals in recovery from trauma, burnout, and high levels of anxiety and stress – individuals that are strong, passionate, inspiring and resilient. I want to highlight this point as it challenges the corrosive effect of stigma so often hindering individuals from reaching out for the support they so desperately need.

You are a specialist trauma counsellor – what first brought you into this field of psychology? I was attacked in my early twenties and suffered a fractured jawbone and concussion. My physical health recovered reasonably quickly, but my mental health recovery was a much more prolonged and painful journey. There were no specialist trauma therapists, at the time, and it took me a long time to recognise that I was suffering from post-traumatic stress disorder. I am passionate about caring for the carers of our world, and educating individuals and organisations in best practice trauma care. Today there are some very effective trauma treatments, including EMDR and TF-CBT. I share a detailed case study of each of these approaches in the book.

Do you see any difference in the psychological responses of aid workers in types of critical incident, for example between the aftermath of natural disasters and working in conflict zones? There is a great deal of research to suggest that individuals recover better from a natural disaster than a man-made incident, such as a war zone, or terrorist attack. But it is important to note that each individual will be impacted in a different way. During the assessment we will explore the client’s history of trauma, support structures, and other influences that may be impacting their mental health at the time of the traumatic event. All of these factors can have an impact on how an individual copes. The organisation I founded, FD Consultants, aims to show managers that an individual’s symptoms are often based on their personal perception of the event. Also, how someone is supported immediately after an incident can have a fundamental impact on their recovery.

The causes of trauma can be more personal too, can’t they? I’m thinking of the stories you tell in the book about kidnapping and violent assault of humanitarian aid workers. I was moved by the number of aid workers that were willing to share their personal stories with me for the purpose of this book, and the encouragement from within the humanitarian sector. Individuals wanted to support the book as they felt it was much needed. There are some very moving accounts of individuals’ experiences. I have taken care to conclude each of these personal stories (including my own) in the final chapter of the book, ‘the complete trauma grab bag’, highlighting their personal recovery and experiences of post-traumatic growth.

Are aid workers generally better supported psychologically today than they were 10 or 20 years ago? I would say yes to this, although there is still a great deal to be done to improve psychosocial services in the sector. Stigma and fear of career development still stand in the way of accessing services. There have been many high-profile cases of sexual exploitation recently in the media. This really is the tip of the iceberg, as I am aware of many cases that are waiting to be investigated, and, due to poor policies and procedures, survivors are not being supported efficiently. FD Consultants mainly support organisations after a crisis. We are trying hard to educate organisations to invest in preventative measures, such as training staff in trauma, stress and sexual violence awareness.

It is a natural human reaction to want to help others in distress. What advice would you give to someone travelling out to an incident or situation for the first time? FD Consultants offer pre-deployment resilience consultations, which review resilient and risk factors and we can make recommendations to support individuals. Individuals need to be stress and trauma informed, they need to understand their own stress cycle, triggers and coping strategies. They need to hold healthy boundaries, and understand how easy it is to overstep these boundaries when we are faced with diversity and hardship. Individuals need to be aware of the impact of vicarious trauma. Attending a trauma and stress management program is the best way to gain the relevant knowledge, understand the risks, and build resilience.

We speak to Fiona Dunkley, author of *Psychosocial Support for Humanitarian Aid Workers: A Roadmap of Trauma and Critical Incident Care* (Routledge)

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