

Ten books

Chosen by Raj Persaud

Choosing ten books you would take to a desert island as your sole companions is not that difficult a task for a consultant psychiatrist working in the National Health Service. This is because current working conditions remarkably resemble eking out an existence in a desolate place. You have to make do with whatever detritus you find washed up on the shore as resources, and after a long while, you might find a footprint in the sand indicating that a manager once passed by. This discovery produces a mixture of emotions, including fear, because you aren't sure if you ever meet whether you will be able to communicate, and also whether you might not be eaten alive.

I was also told very firmly that on my desert island my luxury apparently cannot be any kind of brain scanner, so any work I attempt to do while marooned shall have to consist of merely thinking hard about the problems that beset the discipline. But as a philosopher once said, it is amazing how much effort people will put into avoiding thinking, so I am looking forward to some time and space to myself.

These books then are what I would take with me to my island, for these volumes are not just great friends, they are also most powerful weapons to ward off attacks from prowling positivists and menacing managers.

The only field where thinking is the exclusive activity is philosophy, and these books are entirely from that discipline, a subject I studied formally only after graduating from medical school and obtaining my degree in psychology. After my first philosophy class, I discovered, to my discomfort, that my real education was only now beginning.

The attraction of psychiatry and psychology was always that these disciplines were supposed to confront the most consequential issues in life, such as what our response could or should be to catastrophe and despair, or what reality is, given that it seems to be so easy to lose one's grip on it. Yet when I arrived in the field it appeared that the academics were elegantly waltzing around the difficult

issues, embracing instead anything that might produce a publishable although irrelevant result. There is currently an obsession with the measurable and data – to the exclusion of understanding that the vital controversies are not even addressed by our current reductionist approaches.

As a result of my strong personal reaction to reductionism, I went about studying a wide variety of subjects at university level, including history, statistics and economics. It was perhaps because I attended too much sociology of law at University College London and life drawing at the adjoining Slade School of Art that I came to fail anatomy in my first year at medical school . . . so the reductionists had the last laugh.

According to hard-core scientific reductionists everything that happens, including mental events, occurs as a result of the interaction of the four forces currently recognised by physics to exist – strong and weak nuclear forces, gravity and electromagnetism. Reductionists would logically have us all ultimately become physicists in order properly to help our patients and make discoveries about mind.

However, we should not be too hasty to abandon reductionism, because after all it did give us the human genome and space travel, among many other modern wonders. Reductionism's current hold on science means that all explanation is attempted in terms of ever more minute entities. But this has been the mark of some of science's greatest successes, for example the major methodological triumph in recent years has been the demonstration that the unit of classical heredity, the gene, is a macromolecule.

The Heritage of Thales

The first reductionist thinker and also the first Western philosopher of any description was Thales, a Greek born around 636 BC in Turkey. Although his reductionism led to some real howlers – like his assertion that water is the fundamental substance of which all matter is constituted – he also used reductionism highly

effectively, for example he successfully predicted that there would be an eclipse of the sun in 585 BC. This is arguably the first example of successful prediction based on scientific principles – although some claim that Thales got this right just through a lucky guess. How little has changed over the millennia when academic controversy is ignited by your results!

The trouble is that all reduction is about simplification; consequently, there is always the risk of oversimplification. Sometimes in reducing something we are merely eliminating it from our description of the world – if a mental state is explained merely as a combination of neurotransmitter actions, have we just removed the personal sensations involved in that experience, by dropping down to the level of molecules?

Whatever the problems of reductionism, it was Thales who first conceived the principle of explaining a multitude of phenomena by a small number of hypotheses. For example he apparently explained earthquakes on the basis of his mistaken belief that the Earth floats on water. But the real importance of Thales' idea is that he was the first recorded person who tried to explain data by rational rather than by supernatural means.

This can be seen as the very first attempts to come up with laws of nature – something anyone in science is still trying to do today. None of Thales' works survives, which simply adds to the romance of this mysterious figure in my view, and I love collecting anecdotes about him. Plato tells a story of how one night Thales was gazing at the sky as he walked, and so fell into a ditch. A pretty servant girl lifted him out and said to him 'How do you expect to understand what is going on up in the sky if you do not even see what is at your feet?'. Perhaps this is the first absent-minded professor joke in the West. The best account I can find of Thales in one volume is the wonderful *The Heritage of Thales* by Anglin & Lambek (1995).

What I find inspiring about Thales is the scale of his ambition, given how little resrouce he had compared with us today, and this continues to inspire me whenever a colleague gets a big research grant and I don't. But his struggles raise for me the issue of whether the attempt to come up with laws in psychology and psychiatry is fundamentally misguided. Because unlike the rest of the natural world, our subject matter – the human mind – is constantly

changing in essence. The kind of person born today possesses a mind perhaps very different from someone alive just 100 years ago, so laws of behaviour or mind are likely to be merely transient and constantly in need of revision or updating. Perhaps this is the first and only law of human behaviour, that there is no fixed human nature.

Anaximander, possibly a pupil of Thales, also thought about the problem of what are the ultimate building blocks of matter. He had the incredible idea that the world must be symmetrical and so he envisioned a fundamental element that is nothing like anyone had seen before – a special substance he called *apeiron*, meaning ‘without boundaries’. He theorised that this infiltrated everything and, owing to the inherent symmetries in nature, other substances formed from it. The astonishing thing is that this is exactly what modern physics proposes in many forms – the Higgs field, positive and negative charged particles and antimatter. It is such material that renders Thales and his contemporaries an endless source of fascination for me.

Suppositions like that of Anaximander of new fundamental substances, which cannot be detected conventionally, remind one of other exotic theories, such as those of the psychoanalyst Wilhelm Reich (1897–1957), who notoriously argued that a substance called orgone permeates the universe and possesses healing powers. But more mainstream psychoanalysts met their match in the menacing form of Karl Popper, who effectively cordoned off pseudo-science from respectable intellectual inquiry, lumping Marxism and psychoanalysis together and abruptly showing them the door from the exclusive club of sciences.

The Logic of Scientific Discovery

Popper, a British but originally Austrian philosopher, asserted that ideas are only truly scientific if they are testable in some independent manner. This leads to the position that you are only deserving of intellectual respectability if you can specify the conditions under which you will give up your beliefs, and you also then actively seek to set up those conditions. This is the essence of the experiment, the procedure that is the bedrock of science.

It was reading Popper’s *The Logic of Scientific Discovery* (1959) that led me to start asking at psychiatric conferences of the main speakers ‘Could you please

specify the conditions under which you are willing to give up your beliefs?’ But this only got me strange looks and requests to sit down.

Popper also led me to the view that science is not a body of facts or data, but merely a method – my definition of science is the systematic attempt to detect error in our ideas. And a good experiment is one whose methods and results effectively eliminate viable competing theories. Reading Popper brought me inevitably to the astonishing and disturbing conclusion that most scientists do not themselves understand what science is, and are actually confused about why they are using the procedures they employ.

As a result, when teaching junior doctors at the Maudsley I would start by asking for a definition of science, only to be met by very odd and incoherent answers. Yet they arrived after studying science A-levels for 2 years, plus 5 years of scientific medical school and then often several years of a higher science degree.

The Structure of Scientific Revolutions

The antidote to Popper is Thomas Kuhn’s *The Structure of Scientific Revolutions* (1962), in which Kuhn argued that you cannot test everything and that scientists can only proceed by making some basic assumptions which are not challenged. The set of beliefs common to a community of scientists guides their endeavours, but can come unstuck when results become increasingly incoherent – leading to a ‘paradigm shift’. This is a period of turmoil in a science when it becomes necessary for old assumptions to be questioned, abandoned and new ones to take their place.

We need a paradigm shift in psychiatry today as never before. For example, biological psychiatry continues on the assumption that reliable physiological differences will eventually be found among those with mental illness, even if they cannot yet be demonstrated. This basic assumption is not amenable to testing because no amount of failure to confirm it would count as adequate disconfirmation, for the committed biologists. There could be no experimental result that would stop biologists looking for the cause of mental illness in the brain, raising the question of whether the driving force behind their thinking is strictly scientific in the Popperian sense.

Descartes: The Project of Pure Inquiry

My strong scepticism was first inspired by René Descartes – perhaps the greatest doubter of all time, given his incessant need to reject any belief of which he could not be absolutely certain. Descartes was born in 1596 in La Haye in France, a small town between Tours and Poitiers that has since been named after him. Descartes lamented the lack of precision he found in philosophy of the day, compared with the rigour of mathematics and, in particular, the absolute certainty of mathematical proof. His chronic uncertainty about anything outside of mathematics led him eventually to doubt his own existence and to wonder how he could ever be sure he even existed – for if he could not be sure of that then what could he be sure of? Perhaps his existence was only a kind of dream.

Descartes’ momentous discovery was that, if he doubted, then something or someone must be doing the doubting, therefore the very fact that he doubted proved that he existed. Hence, the most famous quotation in philosophy, ‘*Cogito ergo sum*’ (I think, therefore I am). Strictly speaking this should be ‘I doubt and because I doubt, therefore I know I exist’.

The best account of Descartes is Bernard Williams’ very difficult book *Descartes: The Project of Pure Inquiry* (1978). It is worth reading just for the relief of at last knowing a proof for your own existence – something you often need when trying to get the hospital management to listen to you. However, I have yet to find Descartes’ arguments of any worth when disputing with a sufferer of Cotard’s syndrome, or the delusion of nihilism.

The Concept of Mind

Descartes is also famous for Cartesian dualism, by which he postulated that we are constituted of two different substances, body and mind, with mind not being explainable by or reducible to the material. Gilbert Ryle, Waynflete Professor of Metaphysical Philosophy at Oxford, mocked this view as ‘the dogma of the ghost in the machine’. Ryle’s own thoughts about consciousness are explicated in his seminal work *The Concept of Mind* (1949). Reviewing this, the philosopher J. L. Austin wrote ‘Not only is the book stimulating, enjoyable and original, but a quite unusually high percentage of it is true’ (Wood & Pitcher, 1971).

Ryle argues that the Cartesians are as erroneously reductionist as the materialists, in trying to diminish mind to a single ethereal substance rather than a physical one. His thesis is that the many and various ways we speak about 'the mind' are potentially misleading, and that mind is an emergent property of the brain, but it would be impossible to look closely at the brain and 'find' the mind located somewhere in there.

Talking about mind as different from the body, Ryle argues, is a bit like having been shown around Oxford University with its various colleges, laboratories and offices, insisting on asking precisely where the University is. The University is an emergent property of its various components – it is not located anywhere specifically, but could not exist without the constituent offices, colleges and laboratories.

Some accused Ryle of providing a philosophical justification for behaviourism, although Ryle vigorously denied this. Ryle's profound influence for me is his use of concrete examples, like the one about the tour of Oxford, to illustrate the 'category mistake' he believes underlies most problems in trying to understand consciousness.

Alan Turing

A similar brilliant use of concrete analogy, or thought experiments, can be found in the Turing test or the Turing machine. At the secret code-breaking centre at Bletchley Park in England in 1943, the mathematician Alan Turing and his colleagues built Colossus, a calculating instrument that could decode messages scrambled by the German Enigma device. At the time, the loss of shipping was putting Britain in danger of being starved out of the Second World War, and Turing's cracking of the Enigma code meant that the Allies could finally track German U-boats and defeat them in the Atlantic Ocean.

So if any individual could be said to have made a decisive intervention in world history during the 20th century, Alan Turing would be one to lay a large claim. Yet a grateful Britain soon set about persecuting him. In 1952 he was arrested for a homosexual relationship which he did not attempt to deny, arguing that there was nothing wrong with his sexual choice. Instead of a year's imprisonment he submitted to a course of oestrogen injections designed to lower the libido of 'perverts'.

As homosexuals were ineligible for security clearance, he was also, of course, sacked from his code-breaking work by the Government. Turing was found dead from cyanide poisoning 2 years later, although controversy remains about whether it was suicide or not. Close relatives believe that it was an accident, as a half-eaten apple beside his bed showed that the poison had lingered on his fingers from a previous chemistry experiment. But then again this is what he may have wanted his mother to believe.

Turing believed that descendants of Colossus in the form of superior calculating or computing machines would one day possess minds or consciousness in the way that humans do. He even predicted that this would happen by the end of the 20th century. He proposed what remains the most famous test of consciousness, now known as the Turing test, in which an interrogator alternately asks a hidden computer and a hidden human being a series of questions. If the questioner is unable reliably to distinguish between the machine and the human from their answers, then the machine could be said to be conscious in much the same way that the human is.

This famous test for artificial thought was first published in 1950, but the exposition of Turing's ideas and life that really interested me in the problems of a computational view of mind appears in Andrew Hodges' book *Alan Turing* (1985).

Consciousness Explained and The Rediscovery of Mind

John Searle, Professor of Mind and Language at the University of California at Berkeley, attempted to rebut Turing's test with his Chinese room argument (Searle, 1980). He imagined a man sitting in a room who does not understand a word of Chinese. Observers outside the room can be fooled into thinking that he understands Chinese perfectly. Through a letterbox the man receives questions written in Chinese characters; he looks them up in tables and copies down the symbols indicated by the tables to be the appropriate answer. Thus, Searle argued, a machine could pass the Turing test, but still remains a mindless manipulator of symbols without understanding the questions put to it by a human.

The argument against Searle's Chinese room model is that he is looking for understanding in the wrong place. The man in the room may not understand

Chinese, but perhaps the man and the tables within the room taken as a system do. It is the whole room that should be regarded as the language user, if there is to be an accurate analogy of a symbol-processing computer.

Searle's contribution to the artificial intelligence debate first attracted my interest in Daniel C. Dennett's masterful *Consciousness Explained* (1992). The Turing test and Chinese room are philosophical thought experiments reminding us that psychiatrists, unlike other medical practitioners, are the only doctors who have no direct access to our subject matter – the mind. No matter what the brain-scanning experts might try to tell you, whenever we interact with our patients our research and clinical activities are based on inferences we are constantly making about what is really going on in their minds.

A common confusion is to assume that the patients' answers to our questions, or their behaviour, the only materials we usually have to work with, are a reliable indicator of what's inside the 'black box'. I find John Searle and Alan Turing a useful dose of humility when my clinical decisions or research suppositions are seducing me into the delusion that I can read minds.

Searle is a leading critic of cognitive science, in particular of the current vogue for a materialist account of mind, and his views had a huge impact on my thinking when they were most elegantly proposed in his book *The Rediscovery of Mind* (1992).

But if scientific facts are publicly observable data, demonstrated by experiments, then one problem of mind is that your experiences are inside your mind with a kind of 'insiderness' that is vastly different from the way that your brain is inside your head. Someone else can look into your head and see what is inside (this is increasingly rewarding, owing to advances in brain-scanning and other technology), but no one can open your mind and look into it, at least not in the way that we look at any other phenomena in the universe.

If what happens in your experience is inside your mind in a way in which what happens in your brain is not, it seems that your experiences and other mental states cannot just be physical states of your brain. There has to be more to your mind than your body with its nervous system.

The view that people consist of nothing but physical matter and that their mental states are physical states of their brains is called physicalism (or sometimes

materialism). The idea that appears to have hijacked modern psychiatry is that we will, if we persist, eventually discover that experiences are really brain processes, just as we have discovered that other familiar things have a real nature that we couldn't have guessed until it was revealed by scientific investigation.

However, to discover that sensations and feelings are really just brain processes we would have to analyse something mental – not an externally observed physical substance but an inner experience – in terms that are physical. There is surely no way that a large number of physical events in the brain, however complicated, could be the parts out of which a sensation is composed. A physical whole can be analysed into smaller physical parts, but a mental process cannot be.

Mortal Questions

It was the work of American philosopher and professor at New York University, Thomas Nagel, on how to reconcile the personal subjective first-person view of the world with the objective impartial account of science, that first drew me to these issues. Possibly his most influential piece is his journal paper 'What is it like to be a bat?' published in 1974 and included in his collection *Mortal Questions* (1979).

Thus far, I have mentioned dualism, the view that you consist of both a body and a soul, so that your mental life goes on in your soul, and physicalism, the view that your mental life consists of physical processes in your brain. But there is a third possibility, that your mental life goes on in your brain, yet all those experiences, feelings, thoughts and desires are not physical processes there. This would mean that the grey mass of billions of nerve cells in your skull is not just a physical object. It has lots of physical properties – great quantities of chemical and electrical activity go on in it – but it has mental processes within as well. This view that the brain is the seat of consciousness, but that its conscious states

are not just physical states, is called dual aspect theory and this is what I personally subscribe to. The way I describe it to junior doctors and medical students is that the mind is to the brain what a painting is to a canvas. You need a canvas to support a painting – but studying the canvas will reveal much less about the painting than an understanding of art would.

The Will to Power

This artistic analogy serves well to explain my final book choice – Friedrich Nietzsche's *The Will to Power* (1968). The importance of Nietzsche for me includes his view that truth is not something we discover 'out there' as separate from us, but instead is a vision we impose upon the world driven as we are by our egos. Our systems of understanding the world therefore have less to do with logic and more with artistic creation. However, Nietzsche is also very much for our taking relentless responsibility for the consequences of our decisions and our understandings.

It is a lack of ability to accept accountability for our own lives and choices that I see daily in my clinic as one of the major causes of psychological disturbance. Yet this is not a perspective one finds advocated much within our field and I feel that psychiatrists frequently choose to shoulder an impossible burden when we take on individual responsibility for our patients' contentment and stability.

Nietzsche's views could of course be turned against him, as he did appear to suffer some kind of psychotic breakdown for the last 11 years of his life (possibly assisted by the misuse of chloral hydrate and the tertiary symptoms of syphilis). He was perhaps veering towards some psychological disturbance before then, as he often publicly lamented that few contemporaries could understand his own greatness. Three chapters of his book *Ecce Homo*, completed in 1888, were entitled 'Why I am so clever', 'Why I am so wise' and 'Why I write such good books' (Nietzsche, 1992).

Nietzsche has always suffered from an undeserved reputation for being a supporter of fascism, but this was in fact due to the posthumous unscrupulous re-editing of his notes by his sister and nurse Elizabeth, who was married to an anti-Semite. So the idea of the master race has little to do with Nietzsche's famous concept of the 'superman', who is able to face the chaos around him and still impose order upon it through the sheer force of his 'will to power'. I know of no better description of the psychological tools you need to work in the National Health Service as a consultant psychiatrist today.

- Anglin, W. S. & Lambek, J. (1995)** *The Heritage of Thales*. New York: Springer Verlag.
- Dennett, D. C. (1992)** *Consciousness Explained*. London: Allen Lane.
- Hodges, A. (1985)** *Alan Turing*. London: Burnet Books in association with Hutchinson.
- Kuhn, T. (1962)** *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.
- Nagel, T. (1974)** What is it like to be a bat? *Philosophical Review*, **83**, 435–450.
- (1979) *Mortal Questions*. Cambridge: Cambridge University Press.
- Nietzsche, F. (1968)** *The Will to Power*. New York: Random House.
- (1992) *Ecce Homo* (trans. R. J. Hollingdale). Harmondsworth: Penguin Books.
- Popper, K. (1959)** *The Logic of Scientific Discovery*. London: Hutchinson.
- Ryle, G. (1949)** *The Concept of Mind*. London: Hutchinson's University Library.
- Searle, J. R. (1980)** Minds, brains and programs. *Behavioral and Brain Sciences*, **3**, 417–458.
- (1992) *The Rediscovery of Mind*. Cambridge, MA: MIT Press.
- Turing, A. (1950)** Computing machinery and intelligence. *Mind*, **59**, 433–460.
- Williams, B. (1978)** *Descartes: The Project of Pure Inquiry*. Atlantic Highlands, NJ: Humanities Press.
- Wood, O. P. & Pitcher, G. (1971)** *Ryle*. London: Macmillan.
-
- Raj Persaud** Consultant Psychiatrist and Senior Lecturer, The Maudsley Hospital and Institute of Psychiatry, Denmark Hill, London SE5 8AF, UK