Book

Finding the serious in the absurd

Ben Goldacre is a celebrity. He has written two best sellers (Bad Science followed by Bad Pharma), appeared on QI, has a few hundred thousand Twitter followers, done stand-up comedy, and is now bringing the virtues of randomisation to parts of government that have never heard of this, let alone practised it. An active clinician, Goldacre is not just influential, but uses that influence for public good—the two are not always synonymous.

But before he joined the scientific establishment, Goldacre used to work for me. As Michael Caine never said "not a lot of people know that", because we never wrote anything together. Goldacre's main output at that time was his *Guardian* column, and unlike scientific papers, journalism is a solitary pursuit. But our time together ended well for both of us—he left with a Wellcome Fellowship, and I met Dara Ó Briain.

And now, like all successful columnists, Goldacre has put together his journalism into a collection, I Think You Will Find It's a Bit More Complicated Than That. There are brief cameo appearances from the cast of characters familiar to those who have read Bad Science. Gillian McKeith, or as Goldacre puts it "to give her full medical title, 'Gillian McKeith'" foolishly decided to challenge him on Twitter, whilst the pantomime villain Matthias Rath (cue boos and hisses), who promoted vitamins as the solution to the South African AIDS epidemic with the shameful support of then President Thabo Mbeki, slips into a piece on the Catholic Church, but most of the rest will be new to those who only know Goldacre from his books.

The secret of Goldacre's early success is simple. We love people getting it wrong. Watching people making fools of themselves is always more

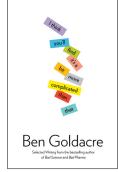
interesting than watching them not fall over during their first wedding dance, or not farting whilst reading News At Ten. And so it is with science. We like reading about diet gurus with no knowledge of human physiology, security experts who seem to think that detecting bombs in airports is akin to dowsing, policemen who think nanobots will catch paedophiles, or the BBC falling for nonsense about bioresonance and smoking. Goldacre's skill is to use all these examples of epic ignorance or failures to draw out important principles of how science actually works, and how statistics should be used, which if he simply chose examples of people getting it right, would be less eye catching or laughter-inducing.

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Goldacre has a marvellous ability to find the absurd in the serious, and the serious in the absurd. The latter is exemplified by his account of a trial done by James Rubin and myselfmy lame excuse for mentioning it is because I didn't know our study had featured in Goldacre's column until I opened this book. With the help of two medical students we ran a randomised controlled trial (RCT) to tackle a question of importance to many of us, especially penniless medical students: how to improve the taste of cheap wine. A device called a wine magnet was being heavily promoted as doing just that. We showed in a properly rigorous double-blind trial, published in the esteemed Journal of Wine Research, that it did no such thing. Goldacre treats the study in an appropriately light-hearted way, but ends with his characteristic sting in the tail, noting how unconventional or alternative practitioners often claim that it is too expensive for them to be able to do such an assessment of their own product. Our trial cost £70 (it was very cheap wine).

My favourite piece in this collection? It's the 2011 column concerning a BBC news report about unacceptable variation in bowel cancer mortality, which ranged from nine to 30 per 100 000 people in different parts of the UK. These days variation is always "unacceptable", just as councillors are always "trained" and consultations invariably "widespread", but I digress. Back to "unacceptable" cancer variation. The explanation was not difficult to find-the areas contributing the data points were of vastly different sizes. Not surprisingly the smaller the population of any given area, the wider the variation. A funnel plot, courtesy of statistician David Spiegelhalter, gave the game away, and also provided the piece with a nicely punning title-"Beau Funnel". All of that is interesting enough, and Poisson distributions have always been my favourite-reading Goldacre brings out the inner geek in many of us. But it is the epilogue that catches the eye. After Goldacre's column was published, a BBC news editor responded. "Dr Goldacre suggests the difference between the best and worst performing authorities falls within a range that could be expected by chance. But that does not change the fact that there is a three fold difference between the best and worst authorities". This classic piece of self-destruction allowed Goldacre to introduce something new to me. This is the Kruger-Dunning effect the state of being too stupid to know how stupid you are being.

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I Think You Will Find It's a Bit More Complicated Than That Ben Goldacre. Fourth Estate, 2014. Pp 496. £14-99 ISBN 9780007462483