

With the aid of a retrospectoscope it is easy to find

Hippocratic doafs, curers of ill repute

Medicine is not a science" could be the theme, for utterly different reasons, of these two books. *Bad Medicine* by David Wootton is an overview of two and a half millennia of Western medicine, of which "before 1865 all medicine was bad medicine", the Hippocratic tradition being, "not a science, but a fantasy of science". On the other hand, Kathryn Montgomery, in *How Doctors Think*, argues that medicine's everyday business of diagnosing disease and bringing comfort can probably not be considered a science. If Wootton's interest is centuries of incompetence, Montgomery's interest is the achievement of competence despite overwhelming complexity. "Why were they all so stupid?" versus "How do any succeed at all?"

The books have similarities. Neither author is a doctor, Wootton being a historian while Montgomery specialised in English literature, and both are refreshingly willing to confront difficult questions. Both also have daughters in close contact with medicine — Wootton's being a doctor and Montgomery's having cancer diagnosed at a distressingly young age — and both incorporate their daughter's experiences. There the similarities end. Montgomery's book is a thoughtful, elegant, gentle, humble set of reflections, whereas Wootton's is a combative polemic.

Montgomery approvingly quotes William James: "All human thinking is of two kinds — reasoning on the one hand, and narrative, descriptive, contemplative thinking on the other." Wootton wants more reason, more logic, more statistics, whereas Montgomery sees narrative thought underpinning medicine as a professional practice, as she carefully differentiates "medical science" from "scientific medicine".

For three decades, Montgomery has immersed herself in medical schools, teaching medical humanities and bioethics while observing colleagues and students. Avoiding the ethnographer's endemic risk of "going native", she retains critical acuity while knowing that "physicians [and] anthropologists do their work between science and subjectivity".

If most of this review discusses Wootton's text, it is because I have nothing but admiration for Montgomery's book, where I recognise so well the distinctive modes of medical thinking. I wish only that Wootton could have read it before writing his own book.

All is blame and guilt in *Bad Medicine*, and few prior to 1900 come out well, the usual heroes having feet of clay and equally muddy brains. Whereas Wootton's book feels like an account of Africa written by someone who has never been there, Montgomery has instead lived in the village for decades, speaking medicine fluently.

Both books consider the phrase *primum non nocere* (firstly, do no harm), whose

Latin, Wootton points out, cannot be Hippocratic and is probably a mistaken 19th-century quotation from 17th-century physician Thomas Sydenham. From there it is easy to say: "Newly aware of the extent to which

doctors were capable of doing harm, the medical profession reassured themselves with the thought that Hippocrates had shared their concern." Maybe, but Hippocrates in *Epidemics I:11* does say: "Either help or do not harm the patient." Is that not clear enough? In contrast, Montgomery explores how doctors use aphorisms to encapsulate the conflicting pressures of clinical encounters, sometimes with a wry humour, as when, recognising how interventions sometimes make doctors, not patients, feel better, they paraphrase *primum non nocere* as, "Don't just do something, stand there!"

Wootton divides medicine into three phases. The Hippocratic tradition ("the placebo effect" — or worse); the period from Vesalius to Claude Bernard, populated by "brilliant scientists, cruel men and ineffectual doctors", where only knowledge progressed, not therapy; and the modern period, post-Lister, when germ theory and statistical analysis heralded "death deferred". Mostly, though, there was "ineffectual progress, immoral progress, [or]

progress postponed", because medicine was not scientific. Wootton wisely does not comment on contemporary medicine but mentions "how limited the achievements of modern medicine are". Curiously, though, he

argues for homeopathy, precisely as a placebo.

Few medical heroes survive unscathed. William Harvey "asked his readers to accept that the blood circulated... without being able to explain why it did so". James Lind may have helped show that vitamin C prevented scurvy, "but his failure to press home the implications of his single trial... mean that he actually deserves to be left in obscurity". Ignaz Semmelweis, "a hero, at least in the eyes of some", may have helped prevent puerperal sepsis but gets "more credit than he deserves". Joseph Lister invented antiseptics, after previously trying cleanliness, although "one has to wonder whether he had the slightest idea as to how to implement such a policy". And, despite discovering penicillin, Alexander Fleming "had not grasped the significance of what he had seen", so that "literally millions of lives

could have been saved... Fleming carries the responsibility for this delay".

For Wootton, each great advance occurs too late. Antiseptics should have been easy to discover, so that "for at least 30 years patients had been dying unnecessarily".

Bad Medicine: Doctors Doing Harm Since Hippocrates

By David Wootton

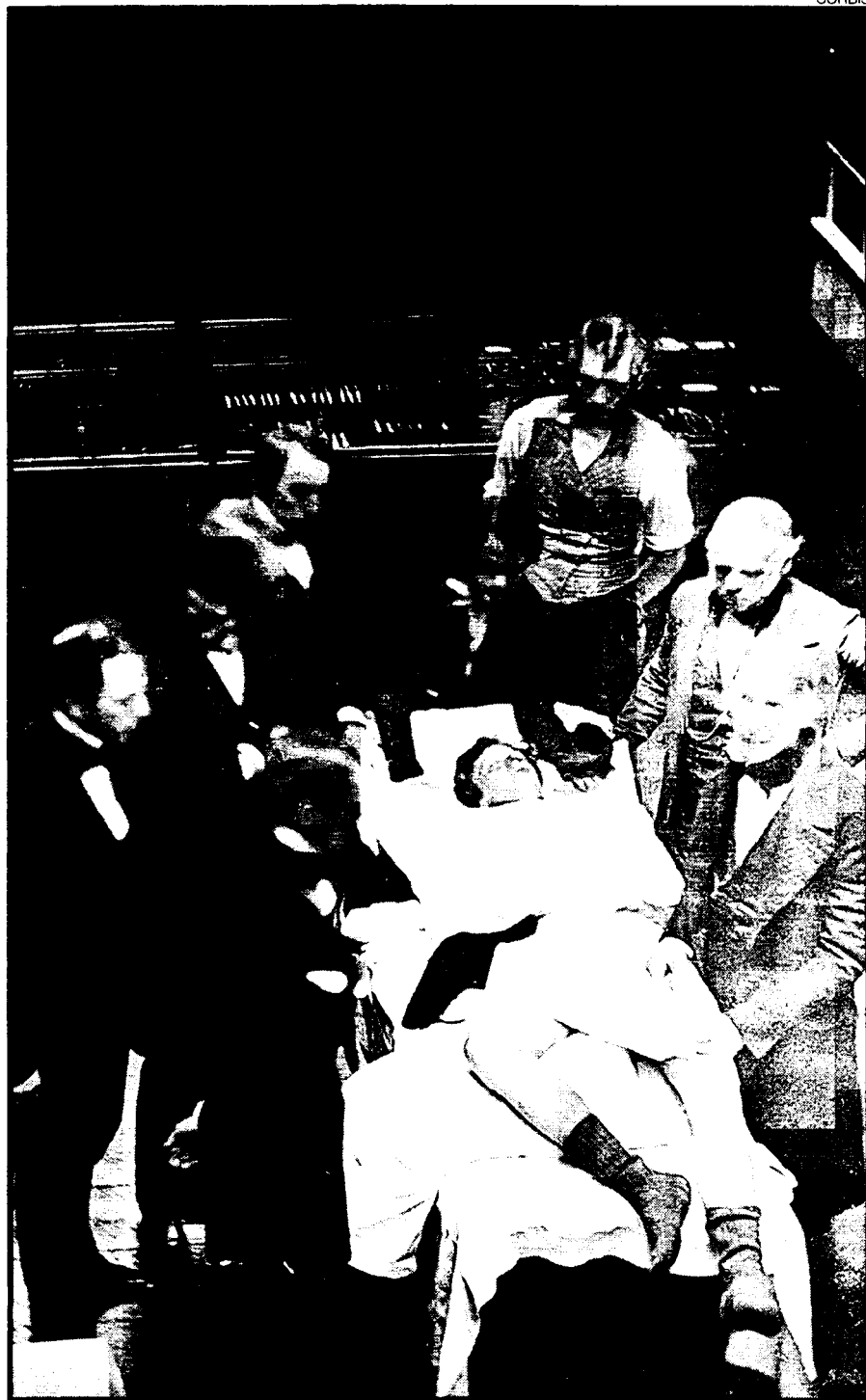
Oxford University Press
304pp, £16.99
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How Doctors Think: Clinical Judgement and the Practice of Medicine

By Kathryn
Montgomery

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fault with much of medical science. **Chris McManus** is unconvinced



Operation under anaesthesia: why did a half century pass between the discovery of nitrous oxide in the 1790s and its introduction into the theatre in 1846?

And with Leeuwenhoek's microscope, germ theory should have been obvious (although at this point I longed to see Wootton find bacteria in putrefying meat using a microscope). Doctors know these problems too well, because their panoply of hi-tech equip-

ment includes an instrument so powerful it is used only with the greatest of care, its laser-sharp beam so bright, its illumination so shadowless, that all diagnostic and therapeutic problems are solved, pathology being found in patients and doctors alike;

it is called the retrospectroscope.

Medical historians fare equally badly, being criticised for "blinkered vision" and attacked for crediting Lind's work on scurvy instead of condemning "the medical profession [who] were responsible for almost [2 million preventable] deaths".

Wootton has no time for Foucauldian relativism, being instead a Kuhnian and arguing that the history of intellectual revolutions requires that derided word, "progress". Wootton's main interest is why progress did not occur: "a history, not of progress, but of delay; not of events, but of non-events; not of an inflexible logic, but of a sloppy logic, not of overdetermination, but of underdetermination", these being "the norm, not the exceptions".

Why was the road less travelled ignored by individuals, institutions or whole societies? Lurking are the usual suspects — incompetence, stupidity, ineptitude, malice, greed — for physicians are also mortals. Compelling, detailed explanations of failure are scarce, however, and absent is any cognitive analysis of how doctors did not think. Absent also are *mentalités*, despite Wootton admiring Fernand Braudel (who knew that "innovations penetrated [societies] slowly and with difficulty").

Wootton rightly argues that statistics have transformed modern medical science, but his reanalysis of Pierre-Charles-Alexandre Louis's 1835 data on the effects of phlebotomy was less than wise. Wootton says "the great advocate of the statistical method... played fast and loose with his own statistics", his figures "conceal[ing] a correlation between youth and rapid recovery. Over the age of 20, the older you are the longer recovery takes". Maybe, but Wootton quite arbitrarily omits the two 18-year-olds and the 19-year-old. These are shark-infested waters.

Wootton often seems distant from the primary literature, and the full online bibliography is yet to appear. Consider the 19th-century history of cholera, of which the traditional hero is John Snow, whose meticulous case-tracing showed how the disease related to water supplies from different private companies, even within streets. The iconic removal of the Broad Street pump's handle in the 1854 epidemic is downplayed. "The outbreak was already diminishing (for the water was probably no longer polluted)." For Wootton, the main lesson is how Snow's 1849 monograph did not convince his contemporaries because "his conclusions were directly opposed to the long tradition of Hippocratic medicine, with its single-minded emphasis on miasma or bad air," Wootton writes.

That does not ring true. Consider the young Sir Thomas Watson, later president of the College of Physicians, who in his 1837 lec-

tures, on which his successful textbook was based, described six cases he cared for in the 1832 epidemic, which "began to rage with terrible severity in India, in the year 1817...

From India it spread to Persia; and thence to Russia; and across through Poland to Germany; and at length it was found in Hamburg... eventually [making] its appearance on the eastern coast of this country". Although for Wootton "the chief obstacle [to progress was] that doctors were satisfied with their existing therapies", Watson says of his three surviving patients: "I will not say [they] were cured, but recovered", adding "I will not pretend to say that these persons might not have

done quite as well if they had been left entirely to themselves". Watson describes how in the horrific new disease vomiting and fulminating diarrhoea left the blood "dark and thick, like treacle", unable to circulate and requiring new therapies. Phlebotomy, Wootton's universal *bête noire*, potentially made more sense than immediately apparent, when accompanied, as Watson said, with "mechanical [dilution] by pouring warm water or salt and water, into [the] veins". This is close to modern treatment, fluid in

equalling fluid out.

What about the universal belief in miasmas, straight from Hippocrates? Watson is agnostic, reviewing the various theories, but emphasising "it is... clear to my mind, that [in some cases the poison] was portable, and therefore communicable from person to person".

Wootton attributes an infamous delay in medical history, the half century between nitrous oxide being discovered and the 1846 public demonstration of anaesthesia, to "the indifference, the strength, the pride, the sheer speed" of pre-anaesthetic surgeons. Sir James Paget, the Victorian surgeon and pathologist, asked similar questions, reflecting how "great truths may be very near and yet not be discerned". In explanation, Paget emphasises "the misery [of painful operations] was so frequent, so nearly customary, deemed so inevitable that, though it excited horror... it did not excite to strenuous action", and hence was endured, just as, when he wrote in 1879, "we now put up... with many other miseries". Paget did not expect a kindly verdict from history: "Our successors... will look back with horror, and on us with wonder and contempt for what they will call our idleness or blindness or indifference to suffering."

As indeed Wootton does. The only certainty is that our successors will weigh us all in the balances and find us wanting — physicians, scientists, yea, even historians.

Chris McManus is professor of psychology and medical education, University College London.

With wry humour doctors sometimes paraphrase *primum non nocere* as "Don't just do something, stand there!"