Doctopic: Analysis and Interpretation
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The art of medicine

Medicine: art or science?

> "For where there is love of mankind, there is love of the art." *Hippocrates, Precepts*

A few years ago I gave a talk at a book festival about writing and medicine. They'd asked me because I spend half the week as a doctor, and half the week as a writer. We spoke about the UK's steadily deteriorating National Health Service (NHS), about the challenge of an ageing population, and whether our age of spectacular technological innovation has changed the role of the doctor. Was there still an art to medicine, or had it been overtaken by science? My answer to the crumbling of the NHS was investment—the UK spends a fraction of its gross domestic product on health care in comparison with other developed economies. With regard to the ageing population, we discussed the reasons why our culture doesn't seem to be celebrating the achievements of medicine and public health, but bemoaning the results of its unprecedented success. As to the role of the doctor, I suspected it hasn't changed much in millennia, even accepting all the benefits of modernity. No matter how much technology there is, when you're ill, you're still going to have to find someone you can trust.

One of the attendees, an enthusiastic reader called Lucy Webster, got in touch with me afterwards. "Since your talk I've been mulling over the extent to which a doctor needs to be an expert reader", she wrote. "We often talk about a doctor reading and interpreting the body, but I also think that doctors are involved in the reading of language—the text of a patient's story, conveyed in words, syntax, gesture, and expression." Her perspective, as a patient, was that she valued the art of medicine as much as the science.

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At the event I'd spoken of how as a physician it's important to listen to what the patient doesn't say, and to bring insights from beyond medicine to the understanding of each encounter—insights that technology will never be able to offer. Most of us offer a glossed version of ourselves in social interactions, so much so that it can be difficult to be authentic, even when we're in desperate hope of an accurate diagnosis or advice to relieve our distress. Lucy recognised this attitude from her own work scrutinising the written word; like a critic examining a text, she said, doctors have to seek patterns and mis-steps in their patients' accounts of their own illnesses. "A doctor has to know how to read the individual patient in the context of all the other stories they have heard, read and studied", she wrote, "able to provide the alternative interpretation of the tales we tell ourselves about our bodies, our minds, and the relationship between the two".

In my working life as a physician, I've never found the distinction between arts and sciences a particularly useful one. In the earliest ancient Greek texts, medicine is described as a techne—a word better translated as "know-how". It conveys elements of science, art, and skill, but also of artisanal craft. The precise functions of medicine may have subtly shifted over the ages, but our need as human beings for doctors remains the same; we go to them because we wish to invoke some change in our lives, either to cure or prevent an illness or influence some unwelcome mental or bodily process. The goal of medicine is, and always has been, the relief of human suffering—the word patient, from the Latin *patientem*, means sufferer. And the word physician is from the Greek *phusis*, or nature: to be engaged in clinical work is to engage oneself with the nature of illness, the nature of recovery, the nature of humanity.

WHO's definition of health is famously "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". One of the oldest medical texts we know of, *The Science of Medicine* attributed to Hippocrates, sets out the goal of medicine in comparable terms: "the complete removal of the distress of the sick". The text states that the training of a physician requires a long and diligent apprenticeship; it suggests that the physician should approach the patient with as much aesthetic sensitivity as a critic approaching

an artistic work. As just one example from a vast canon, *The Science of Medicine* implores the student to attend to subtleties of each patient's presentation: "the quality of the voice, whether it be clear or hoarse, the respiratory rate, whether it be quickened or slowed, as well as the constitutions of the various fluids of the body"—words that could have been spoken by one of my own tutors, at medical school in 1990s' Edinburgh. It was a traditional programme: 3 years in laboratories and lecture halls, then 3 years shadowing senior colleagues in hospital. At the time, I assumed that the early years were a grounding in basic science and the latter a training in clinical science, but I realise now that the clinical years were as much preoccupied with learning an art.

For example, taking a history is something that once qualified we all take for granted, but there was undoubtedly an art to mastering that methodical and wide-ranging engagement with patients: its interest in each presenting problem and its evolution over time, relevant antecedents, medications, and allergies, family, occupational, and social history. Sifting, probing, weighing each response, judging when to drill down and when to pass over to the next element of the assessment.

Those first histories always took me about an hour—as did a similarly meticulous approach to the physical examination, working slowly from hand, to head, to foot. I still remember one tutor explaining her reasoning for that counterintuitive start at the hand: a competent, gentle hand examination was a way of reassuring the patient, she said, gaining trust before moving on to scrutinise more intimate body topography.

The sequence became second nature—only after it was committed to memory were we permitted to vary it, adding improvisations of our own, learning variations through emulation of successive mentors and tutors. Gradually, with a combination of intuition and instruction, we were to home in on those aspects of each patient's story where a weave in the pattern was frayed, a note was discordant, or the shape in a narrative had warped.

Learning the art was more difficult than rote-learning the science. I remember with embarrassment one awkward early attempt: as I leaned ever closer towards my patient, trying to show concern, he shuffled further and further from my desk—eventually, he shifted his chair. The consultation didn't go well: "if someone moves away from you, it's for a reason", my mentor patiently explained to me. "You'll have to let him go, and find another way into his confidence." There were as many subtleties to the physical examination: I remember one brisk, efficient rheumatologist asking me whether a patient's recent divorce might have a bearing on her presentation. I asked how she knew about the divorce—the patient had never mentioned it—and she referenced the pale halo of skin where a wedding ring had been recently removed. Countless similar examples of subtle observation, or unscientific aspects of medical practice, helped shape me as a physician, and go on shaping my practice today.

As a general practitioner now I see between 12 and 16 patients a morning, and the same again across the span of an afternoon. Where once I might have been given a couple of hours over one patient, the same time now might see me consult a dozen: arranging admission to a hospice, talking a patient with suicidal thoughts through their despair, attending to the subtleties of air movement through someone's lungs, checking a newborn baby, calibrating epilepsy medicines, testing the ligaments of an injured knee. It's not unusual to move directly from helping one couple conceive through in-vitro fertilisation to referring another for termination of pregnancy. It's challenging work, often exhausting, but it's also enthralling and endlessly rewarding. Modern technology doesn't intrude much on many of my encounters; I suspect the kinds of daily conversations I have in clinic haven't changed much in centuries. Similar conversations are going on in health centres all over the world.

If the aim of medicine is to offer the hope of alleviating suffering, to invoke and influence human change, it needs more than science and technology. In a text called simply *The Art*, one of the Hippocratic authors states "there is nothing that cannot be put to use by good physicians, and by the art of medicine". As a profession, medicine is suffused with the language of science and technology, but to practise it effectively is a lifetime's work, and it's my experience that no knowledge related to our humanity, however and wherever gleaned, is wasted. My work as a doctor undoubtedly informs my writing, because to write is to seek to articulate something of value about the human condition, and there's no better profession for offering a ringside seat to the diversity of humanity: young and old, rich and poor, black and white. And it's my impression that the process works both ways: working as a writer trains my ear to the careful use of language in the clinic room and makes me a better doctor. "Doctors have to have ears attuned to the gap, the break, the stumble", Lucy Webster wrote to me, "the equivalent of looking for the missing (or extra) beat at the end of an iambic line". Effective physicians interrogate their patients' choice of words as well as their body language; they attend to what they leave out of their stories as well as what they put in. More than 2000 years after Hippocrates, there remains as much poetry in medicine as there is science.

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Further reading

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