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Metaphor in clinical practice

Clinical thinking is deeply metaphoric, and metaphor is in the foundations of all aspects of medicine. Understanding the role of metaphors in medical concepts allows a more imaginative borrowing of human creativity and makes practice more flexible, adaptive and rewarding.

The immune system recognises antigens. Recognises? Does it say hello? The atrioventricular bundle conducts. Is it a telegraph wire? Stress leads to anxiety disorders. Is anxiety really like concrete fracture?

These are metaphors and models that sit in the foundations of scientific conception of bodily function and illness. They are metaphors rather than 'truths'. We can see that because the immune system does not obviously 'think' and propagation in cardiac tissue is, in other ways, unlike electricity in wires. Yet these metaphors illuminate aspects of the subject that would be hard otherwise to conceive.

Clinicians use metaphors to make technical concepts available to lay people and novices. But, metaphors also ground professional concepts even though clinical reasoning tells us that metaphor is not fact and it is not trustworthy. Metaphor is the stock-in-trade of charlatans and quacks, not clinicians. Yet, however clinicians try to avoid them, metaphors and models (which are metaphors) lie beneath every day practice.

Aristotle saw metaphor as 'the application of an alien name by transference', 1 a shady emotive device serving rhetoric and persuasion, different from literal language of knowledge and truth. Metaphor, we would say, belongs to creative arts, a world apart from the factual and scientific needs of evidence based clinical knowledge and practice. But Aristotle could see that the worlds were not separate for he also said: 'The greatest thing by far is to be a master of metaphor. [It is] a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars'.²

Much description, including scientific description, is 'metaphorical' in that it gives abstracts a material form or makes a visible representation of something invisible. This point was made by William James a century ago when he said: 'All knowledge, including science, is ultimately based on finding an appropriate enlightening comparison or metaphor'. Metaphor and its components (analogy, allegory and model making), by connecting with what we know already, allows unknowns to be experienced as familiars and intangibles to be 'touched'.

Figure 1 is an imaginative picture of a physiological phenomenon, a visual metaphor representing a hypothesis about how neurons relate. It represents something we cannot otherwise perceive; just as a map is a metaphor of the unseen ground that it represents. It is difficult to think about these processes except by metaphors and models, yet they are so entrenched that we see them not as metaphors but as statements of fact.

Such 'models' (in both the physical and conceptual sense) are metaphors that can be used for scientific prediction and research. They are the means by which we come to know what was previously unknown or not available to our immediate senses. We would not be able to talk (or even think) about most of our work without them.

If we accept that metaphor intrudes into our technical and scientific practice, two questions are immediately raised. First, is there a distinction between scientific metaphors (such as Figure 1) and artistic metaphors such as Edvard Munch's 'Melancholy' (Figure 2)? Or are there simply different metaphors that are useful for different purposes? A mechanical metaphor might be useful for physiological description, while a literary metaphor better for a psychological process. Sometimes we need a metaphor that yields prediction, at another time one that deepens our comprehension of what is in front of us.

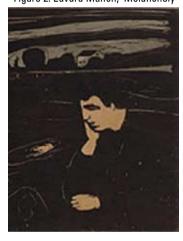
Clearly, all are used. Because of the success of antibiotics, we use infectious illness metaphors to understand many illnesses. But if we constrain ourselves to one type of mechanical metaphor, we abandon the human richness that clinical practice requires. Moreover, closing off creative or 'artistic' metaphor shuts out productively novel ways of construing scientific and factual problems. Imaginative metaphors of 'soil' and 'seed' were central to the concepts of

Figure 1. The synapse Presynaptic neuron Neurotransmitter Dendrite Receptor Neuron

'immunity' and 'germ' as scientist physicians in the nineteenth century wondered how to understand 'germs'. So metaphor is irrepressible and intrudes itself into medicine. Imaginative metaphor is seen in simple form in the false colouring of modern medical imaging, in public health advertising about melanoma, in ideas on child health. But it intrudes more subtly. Take Rembrandt's 'The anatomy lesson of Dr Tulp' (Figure 3) which is oddly exciting, not only in the beauty of its technique and construction or in the subtlety of its anatomy, but also in its power to convey a form of medical life. The focus point in the work itself and its components, the enfolding arch, the esoteric background symbols, the position of the figures, convey visually the otherwise inexpressible sense of exploration, the feeling of enclosure within the arcane, autonomous and ethically special art of medicine, and the relationship between teacher and mature pupils. Creations such as these are part of the tradition of metaphors that shape the modern form of medical life just as directly as 'scientific' metaphors.

Second, at times, dominant metaphors may constrict our view of the patient and the problem. Take the picture drawn by the *Diagnostic* and statistical manual (DSM-IV)⁴ criteria of major depression:

Figure 2. Edvard Munch, 'Melancholy'



'depressed mood most of the day, markedly diminished interest or pleasure in all activities, significant weight loss, decrease or increase in appetite, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or inappropriate guilt, diminished ability to think or concentrate, recurrent thoughts of death or suicidal ideation'.

While this is a list of symptoms that guide the clinician to identify a condition, their nature is understood through metaphors of depletion. We 'recognise' depression through these metaphors.

Figure 3. Rembrandt van Rijn, The anatomy lesson of Dr Tulp



Munch's painting with its downward lines and monochrome gloom, fits this picture of depression. But where do we fit the mental state expressed by the metaphors in the terrible sonnets of Gerard Manley Hopkins?

'No worst, there is none. Pitched past pitch of grief...

O the mind, mind has mountains; cliffs of fall

Frightful, sheer, no-man-fathomed'.5

The dominant metaphor of depletion blinds clinicians and scientists alike to key parts of the experience, a blindness that William Styron damned in his account of his own illness. 'Melancholia would still appear to be a far more apt and evocative word for the blacker forms of the disorder, but it was usurped by a noun [depression]... used to describe an economic decline or a rut in the ground, a true wimp of a word... The word has slithered innocuously through the language like a slug, preventing, by its very insipidity, a general awareness of the horrible intensity of the disease when out of control... a veritable howling tempest in the brain which is indeed what a clinical depression resembles...'.6

As a psychiatrist, I can see dominating metaphors in my own field. Likewise any experienced practitioner becomes aware of the limits that dominant metaphors place on the articulation and grasp of the problems that confront them. General practitioners find that infectious illness metaphors misconstrue noninfectious illness, while shopping metaphors misshape the expectations of the patient. Metaphor can inadvertently add to a patient's suffering, eg. when cancer or AIDS draw on metaphors of the wages of sin.⁷

Metaphors are vital in expanding medicine by allowing us to conceptualise the unseen. But tired metaphors can blinker our view and lead us down well trodden, but erroneous paths. If we can see that our concepts are metaphors rather than 'truths', we can search for more imaginative and adaptive ways to come to grips with every day clinical problems. Breadth of imaginative metaphor makes practice more rewarding for the practitioner and, from the viewpoint of the patient, it deepens the practitioner's comprehension and makes practice more flexible and adaptable.

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