

Vesalius's veracity

The sixteenth-century anatomist Vesalius debunked many of the doctrines of the Greek physician Galen. Vesalius chose his illustrations carefully to act as powerful tools in proving the accuracy of his scientific observations.

Martin Kemp

Showing the tools of the trade was a long-standing practice in the illustration of surgical texts, not least in the manuscript tradition that looked towards Islamic sources. With the rise of naturalistic illustration, particularly in the great picture-books of the human and natural sciences in the sixteenth century, the equipment could be displayed with a new conviction. The instructional role of such representations seems obvious. But is their function and meaning as simple as this?

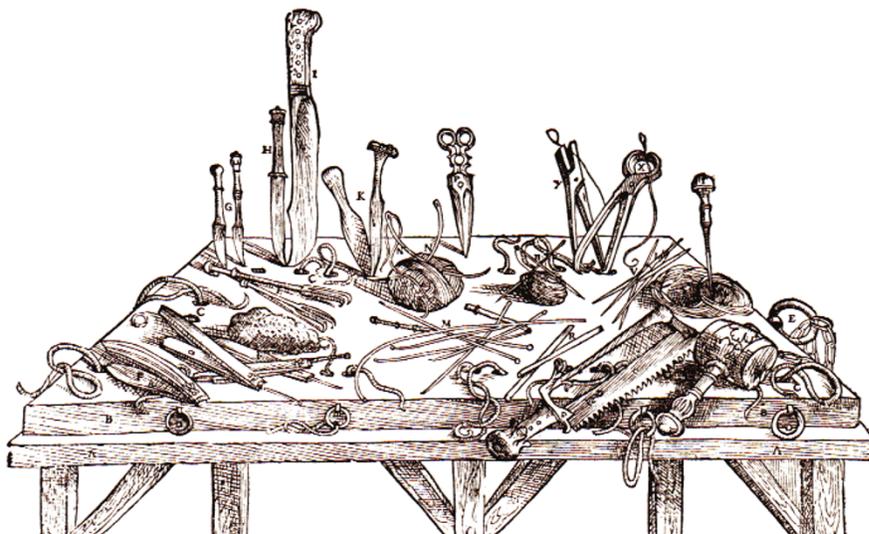
When the anatomist Andreas Vesalius of Brussels displayed in his book an array of dissecting instruments — many of which were common or garden in the literal sense — he was demonstrating to the reader “everything that could be used in the conduct of dissections or an entire anatomy”. The implication is that aspiring dissectors would be fully kitted out if they could lay their hands on everything in the woodcut.

But Vesalius's large and luxurious volume, *De Humani Corporis Fabrica*, dedicated in 1543 to the Holy Roman Emperor Charles V, can hardly be considered as a stock handbook aimed at tirois or even the jobbing surgeon.

The level of knowledge in the *Fabrica* went far beyond the rude empirical procedures needed by a field surgeon or even the kind of court employee Vesalius was aspiring to become. The *Fabrica* was more in the nature of philosophical treatise on the architectural magnificence of the human body, bearing witness to Vesalius's heroic excavation of the inner truths of its fabric.

The illustration of the tools is just one move in a series of visual strategies to underline the veracity of Vesalius's representations. He is at pains to stress that his knowledge is literally first-hand; that is to say he had descended from the aloof heights of the professorial cathedra to undertake the cutting on his own account.

This direct intervention extends beyond anatomies of the dead. He tells us that the board bearing the instruments is “such as we employ in vivisections, resting on a table”. This board, illustrated again on two occasions in the *Fabrica* — once with an unfortunate pig tethered to its rings and apertures, and also within an illuminated letter ‘Q’ with eager *putti* performing the vivisection — makes open reference to the experiments by



Vesalius's “Tools for Dissection” from *De Humani Corporis Fabrica*, Basel, 1543.

Galen, the Alexandrian philosopher and doctor.

Vesalius is at once aspiring to surpass Galen in first-hand knowledge and setting himself up as a second Galen — following his great predecessor's principles of deducing function rigorously from observed form.

In his famous series of musclemen, heroically performing their myological striptease in grand landscapes, Vesalius repeatedly emphasizes the physical reality of his procedures, telling us, for instance, how the figures were suspended by ropes. Less well known is his innovative use of visual proof through mechanical analogies, as in his illustrations of the metal hinge of a window shutter, and his neat demonstration of the restraining role of the transverse ligament in the ankle.

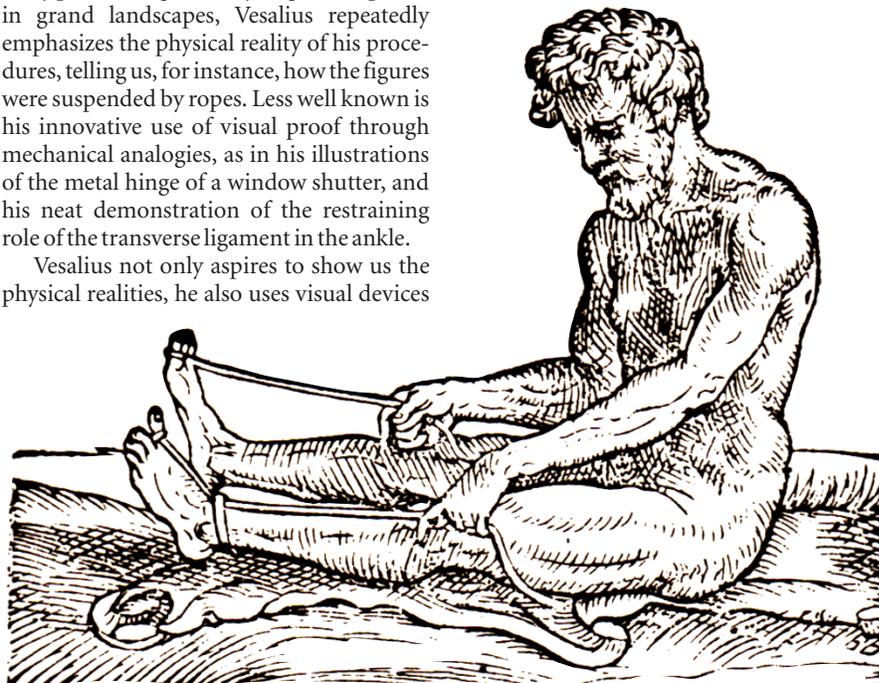
Vesalius not only aspires to show us the physical realities, he also uses visual devices

to convince the reader of the physical truth of his observations.

Among those who emulated such devices were Gottfried Bidloo, who in 1685 showed a fly on a dissection, and William Hunter (1774), who depicted a reflected window on a moist membrane over a fetus. □

Martin Kemp is in the Department of the History of Art, University of Oxford, 35 Beaumont Street, Oxford OX1 2PG, UK.

e-mail: martin.kemp@trinity.oxford.ac.uk



Vesalius's “Demonstration of the Need for a Transverse Ligament in the Ankle” from *De Humani Corporis Fabrica*.