

# Floral tributes

Early science texts carried illustrations that are master-works in their own right.

H. W. Lack

For science, 1543 was a miraculous year. It saw the (posthumous) publication, in Nuremberg, of *De revolutionibus orbium coelestium libri VI*, Copernicus's revolutionary tract hypothesizing that the Earth might not be the centre of the Universe, as well as *De humani corporis fabrica* by Vesalius, the first modern textbook on human anatomy, which was published in Basel. Both works opened up new worlds, as did the German translation of Leonhart Fuchs's (1501–66) herbal, originally published in Basel a year earlier, *De historia stirpium*.

The works of Vesalius and Fuchs relied heavily on illustrations, and it was these woodcuts that effectively established a new field: scientific illustration. Whereas the texts by Vesalius and Fuchs are today of historical interest only, the images are not: the anatomical illustrations Jan Steven van Kalkar created for Vesalius in Padova, and equivalent works done by Heinrich Füllmaurer, Albrecht Meyer, Jerg Ziegler and others for Fuchs in Tübingen, are fully identifiable and rightly regarded as master-works in their fields.

There were, of course, precursors, for example Martin Schongauer's peony, Leonardo da Vinci's lily and Albrecht Dürer's iris. But these naturalistic illustrations remained unpublished for centuries, whereas those by van Kalkar, Füllmaurer and Meyer were integrated into texts and published. They immediately became known to the nascent scientific community as woodcuts and for generations were regarded as reference standards. Moreover, Fuchs's *De historia stirpium* was very quickly translated into German and published, as *New Kräuterbuch*, in 1543. Consequently, this work had an immediate impact on a large audience, not only on the restricted circle of the learned.

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maize, pumpkin and French marigold), illustrating the beginning of that immense shift in world agriculture and horticulture usually called the Columbian Exchange. *De historia stirpium* also contains woodcuts of castor bean and bladder senna from Africa, and hemp, aubergine and peach from Asia. In marked contrast, Fuchs's text is an amalgam of facts observed with his own eyes and opinion expressed by authors of Greek antiquity, notably Dioscorides, and their commentators. There is a clear emphasis on medicinal plants, among them opium poppy, camomile and foxglove — the last a surprise, since its role in therapy for the weak heart was understood only much later. Just as Vesalius is said to have insisted on his students dissecting corpses, Fuchs is reported to have been one of the first professors to take his students on botanical excursions.

After the publication of his *magnum opus*, Fuchs continued to collect illustrations of the plant kingdom, in particular of plants from all parts of the world then known — tulips from Central Asia, Persian fritillary from the Near East, sweet orange from China, and tobacco, tomatoes and sunflowers from the New World, some of these being the first records in Europe.

Altogether, there is good reason why the quincentenary of Fuchs's birth is being celebrated. The University of Tübingen in Germany — where Fuchs was professor of medicine for almost 31 years, serving seven times as rector, chairing meetings between cardinals from Rome and religious reformers including Philipp Melanchthon, and playing a key role in university reform — has organized a series of lectures on his life and work, as well as three botanical excursions. The town and university are organizing an exhibition called "Leonhart Fuchs and his time", opening on 20 June. The Nonnenhaus, Fuchs's home in the centre of Tübingen, still exists and its garden is being restored.

Fuchs's manuscript notes and drawings finally ended up in Vienna. Here, the Austrian National Library will display the *Codex Fuchs* for the first time, as part of the exhibition "A Garden Eden" running from 15 May to 31 October 2001. This nine-volume work, which represents the sum total of Fuchs's botanical knowledge and opinion, containing 1,541 illustrations, can be compared to Leonardo's *Codex Atlanticus* in Milan.

Three major recent or forthcoming publications focus on Fuchs. Stanford University



Green gift: a rose from Fuchs's *magnum opus*.

Press has produced a monumental study by a group of American historians of science headed by Frederick Meyer, which is accompanied by a facsimile edition of *De historia stirpium*. Eugen Ulmer of Stuttgart is to publish an in-depth analysis of the *Codex Fuchs* by the Baumann family, and Taschen of Cologne will publish shortly, in an English/German dual language edition, another reprint of Fuchs's *De historia stirpium*.

Visitors can see fine portraits of Fuchs in oils at the Württembergisches Landesmuseum in Stuttgart and the Art Institute in Chicago. But his most famous legacy enlivens many thousands of gardens whose owners may never have heard of the man: although he never saw these very popular plants, the genus *Fuchsia* was dedicated to Fuchs years after his death. ■

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#### FURTHER READING

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