



A Rob Kessler *Jardim Porcelanico* plate displays the macro- and microscopic structures of wild fennel.

Q&A Rob Kessler

Botanical ceramicist

Artist Rob Kessler adorns porcelain, glass and books with incredibly detailed close-ups of pollen, seeds, leaves and fruit, created in collaboration with botanists in London and Lisbon. As he exhibits *Jardim Porcelanico*, a collection of tableware decorated with magnified sections of plants he collected in Portugal, he discusses the changing face of botany in art.

How did you come to mix ceramics and natural history?

When I was ten my father gave me a microscope. It was a beautiful brass one — I still have it. When I had to choose between studying biology and art, I chose biology. Because my interest was natural history, I found biology completely alien. So I failed my exams. I switched to art and ended up studying ceramics, but most of my work has referenced natural history.



Why did you focus on plant imagery?

I did some projects with micromorphology specialists from the Royal Botanic Gardens at Kew in London, exploring plants as inspiration for the applied and fine arts.

With pollen expert Madeline Harley, I worked on a 2005 book featuring highly detailed microscope images of pollen. Wolfgang Stuppy, a Kew seed morphologist, approached me in 2006 to do one on seeds. We did another on fruit in 2008. On the back of that work, I was invited to be 2009–10 artist-in-residence at the Gulbenkian Institute of Science in Lisbon.

What did you do in Lisbon?

I collected wild plants from around Portugal and cut sections from stems. I imaged them through a microscope at the highest magnification I could, taking 500 frames across one stem so that the final section scaled up to be about 3 metres across. I collaborated

Jardim Porcelanico at AWARD

Part of the British Ceramics Biennial at the Potteries Museum and Art Gallery, Stoke-on-Trent, UK. Until 11 December.

with Vista Alegre Atlantis, Portugal's biggest porcelain manufacturer. I chose a range of recently developed tableware that has odd 'cellular' shapes, and covered the surfaces using prints of about 35 different plant types. Blank plates are to the object-maker what a piece of paper is to the graphic artist — but a plate also carries functional messages.

How does your work fit within the history of botanical illustration?

Two historical pictures of plants, made within three years of each other, show the two classic forms of botanical illustration: Albrecht Dürer's 1503 watercolour of a clump of grasses and wild plants, called *Great Piece of Turf*, and a Leonardo da Vinci drawing of a Star of Bethlehem plant, made around 1506. Dürer's work is pictorial: the plants are so well observed that it is possible to identify every specimen, and the composition shows them in a naturalistic setting. Leonardo's approach was more structural and mechanical, trying to understand how things work from the inside out. Each theme has informed the development of botanical illustration, through the improvement of microscopes to the point at which photography is born. A single plant is presented to show its colours and surface textures, and the functional components — seeds, stamens and fruits — around the flower.

How was the birth of photography significant to botanical studies?

When the camera and the microscope came together, control of the imaging was put in the hands of the scientist. One of the first botanical examples is a daguerreotype [an early type of photograph] of a section of clematis, by Andreas Ritter von Ettinghausen in 1840. Collaboration between artists and scientists withered; as the technology became more expensive and complex, fewer artists could get involved. Technology gradually became an unwitting gatekeeper to interdisciplinary collaboration. So observing has become a forgotten art. It is important to go for a walk and discover something in front of you that you haven't seen before.

Does your use of colour differ from that in scientific imaging?

Yes. It's not like false colour that comes from a computer programme. My materials are more subtly modelled. I'll sometimes follow the original plant or pollen colour, or vary it to reveal different structural characteristics, such as hairs on a leaf or the fleshy structures on some seeds. I model the form strongly, so that it seems three-dimensional. It is a complex process. I will spend a long time giving the specimen its soul back. ■

INTERVIEW BY DANIEL CRESSEY