Research in the Norfolk region lead me to the British Library to access their Red Books as well as this one, courtesy of Lord Cooke at Holkham. The “Red Books”, and Repton’s letters held at the British Library got me interested in the way he used compositional devices from painting, in his landscape design.

The digital photographic Edition that I made, “The Landscape Room” comprises 6 medium format transparencies taken of the parkland at Holkham Hall. The transparencies digitally scanned, and then fractal trees made with a programmer were added in Photoshop. The 30” x 40” Lightjet prints are mounted on aluminium, glazed and framed.
I made the trees obviously artificial to draw attention to the construction of Holkham's landscape (Repton moved millions of tonnes of earth and excavated to extend a vast lake). There is no avenue at Holkham.
Sketches of oak like tree structures made from mathematical equations using B-splines to produce curving branch structures. Trying to simulate the growth form of an English Oak.

Changes in the equation (algorithm) that produces the growth structure of the tree can cause branches to cross over each other. This is a discarded sketch.

I worked closely with Paul Underwood, Blickling’s Head Gardener on this work, to develop convincing oak tree simulations. Also, with the National Trust slide library once foot and mouth made visits to shoot video impossible.

The foot and mouth restrictions became a positive influence to the residency as a result of re-focussing on the slides and working by phone and online with Paul Underwood.

Gordon Selley: www.gordonselley.com

Horizons Empire of Istaria (MMORPG).
I extended the work to show at Laing Gallery and to reflect that location. This still is of Paine’s Bridge, Wallington Hall, Northumberland. I added the growing willows along the riverbank.

**Not film-envy, but Object envy**

Bath University: Department of Biomimetics, Mechanical Engineering

**Digital processes**
1. Algorithm
2. B-Splines
3. Metaballs
4. STL file
5. RP machine

**Collaboration in digital space**
2. Forming collaboration with commercial company
3. Preparing to develop a new technique
Out comes of the collaboration

Art
1 Small polymer trees
2 Macettes for Big Plastic Tree

Science & Engineering
1 Ideas for tissue engineering
2 Concept for scaling up the rapid prototyping process

Model Landscapes
Model Landscapes

computer etched wireline trees model
Model Landscapes
Model Landscapes
Ideas for tissue engineering: how visualisations of a complex system prompted ideas for designing tissue.

In making real 3D objects from data we remain constrained by the technology – it is way behind our imaginations.

Open source rapid prototyping: Adrian Bowyer and RepRap


"I think the actual impact of this research will be precisely nothing," Bowyer says, "since the impact of most research is precisely nothing. But if the idea took off, yes, it could have some quite far-reaching results."

"Biomimetics is to do with taking inspiration for design and technology from nature," explains Bowyer. "I have worked on replication and self-assembly throughout my career; self-copying and reproduction is clearly a fundamental part of biology. And if you look at how we see this machine spreading in a biological context, it's like a virus."

This small self-replicating robot was built using the RepRap prototyping technology.
Distinctions and Counterposes

Working with a radiologist I acquired anonymised MRI data of human heart to develop to use in Rapid Prototyping machine.

Distinctions and Counterposes: 2003--

I wanted to ‘make real’ and tactile the virtual 3D models of the heart. Surgical teams and patients had a strong reaction to this object as they felt they could understand the heart better as an object when seeing in 3D form.

Three dimensional heart produced using rapid prototyping from a container of polymer powder that is fused wherever there is data on the 3D computer file.
Distinctions and Counterposes

Small heart covered in gold leaf

Larger than life size heart, silver plated.

Conceptual Models: beyond abstraction and representation

Simon Patterson  born 1967
© Simon Patterson
The Great Bear 1992

Lithograph on paper
image: 1027 x 1280 mm
on paper, print
The parody of accurately simulating cars that were sometimes stuck together with Juicy Fruit: the last days before the professionalisation of motor racing killed off the independent maverick entrepreneur.

The World Sportscar Championship of 1970 had also ended, on the same day in fact, with a race at Zeltweg. However, several non-championship events were held post-season, including the 1000 kilometres race of Paris, held at Monthlery, and the AvD-SCM-Rundstreckenrennen at Nürburgring. Coincidentally, both were to be held on the same weekend. Whereas most of the major teams decided to go to Paris, including Neuhaus and the other 917’s, most the smaller teams, including those of Kelleners, Craft, Prochet, Lauda and Bonnier chose to go to the Nürburgring instead.


David Prophet in McLaren Chevrolet M12
images © Udo Klinkel

Model Landscapes
Model Landscapes