

'Ravelling, Unravelling'
May 12-28th 2009
Royal Institution of Great Britain
OUTLINE OF WORKS

'Silk' (16mm film, 7 mins, 2009)

'Silk' documents the reeling of the Golden Orb Weaver, a spider unique for the golden hue of the web it weaves. According to folklore the web is so strong that fishermen use it to catch fish in the indopacific isles: The web is thrown into water and unfurls trapping prey. Silk is currently the subject of biomedical investigations because of its high tensile strength (stronger than steel of an equivalent diameter) and potential use as a biomaterial for example as scaffolds for tissue formation. The 16mm film moves between close-ups of the spider's body during the visceral act of extrusion and shots of the crystalline silk pulsating through the air, gathering on a hypnotic rotating prism.



'Mile of String' (sculpture, 50cm x 60cm x 45cm, 2008)

'Mile of string' is a three dimensional drawing made from a single line of string one mile long manipulated to such an extent that it becomes rigid holding itself in a complex fractal like form under its own tension. Although able to trace its outer contour, the majority of the form lies hidden within cavernous spaces inaccessible to the fingertips. It evokes our desire of touch through its highly tactile nature whilst simultaneously denying our ability to grasp it in its entirety because of the seemingly infinite detail. Reminiscent of spatial chaos, Einstein's warped space-time and the enigmatic structures of proteins and DNA which coil and supercoil in ways that elude our contemporary understanding.



'Nidus 1-4' (rapid prototypes, 4cm x 8cm x 4cm, 2009)

Tangles are important features of a number of enigmatic disease mechanisms such as Alzheimer's, CJD, Parkinson's and Epilepsy Arterio-venous malformations are tangles of abnormal vasculature where hybrid worm-like vessels intertwine with themselves rather than with tissue. The complex geometry, blood flow patterns and evolution of these 'snakes in the brain' is poorly understood. A series of intricate rapid prototypes of these structures emphasise their cipher-like form.



'Ravel' (animation, 4 mins, 2009)

This animation produced in collaboration with graphic artist Carl Fairweather fuses ideas from biology and maths and plays on the denial of the physical which virtual animation in this format might emphasise. Twisting, coiling ropes undergo ever more complex permutations whilst being pulled into a magnetic vortex.

