

A brief treatise on knots by Andy Bullock

“The world is bound in secret knots”

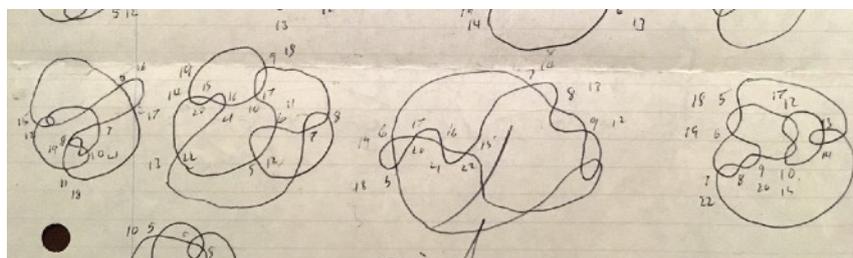
Athanasius Kircher (1602 - 1680), German philosopher and polymath

My *knot works* evolved out of a fine art research project I undertook for my two year MFA post-graduate degree in Oxford. This resulted in the subsequent final year degree show **The topological consequence of being // and the space between us** - a substantial body of work comprising painting, sculpture/installation, photography, film and sound and was based on an extensive investigation of the opaque world of abstract theoretical mathematics.

More specifically the work was inspired by my myself becoming the custodian of the archive of eminent mathematician Clifford Hugh Dowker (1912 - 1982). He worked with the rather arcane field of topology and more specifically the sub-genres of knot theory and sheaf theory. Topology is the branch of mathematics that investigates the properties of *spacial forms*. It can be used to describe the parameters of a geometric object under a continuous *morphing* and *reforming* process which could include twisting, stretching, crumpling, bending and general deformation.

In a much broader sense topology investigates and explains the mathematics of *dimensional space*; and as these spaces often only exist in the minds of those who work in this area we can safely refer to them as *conceptual spaces*. It was on first opening the hard-bound copy of ‘*Lectures on Sheaf Theory*’ (Dowker, C. 1956), a weighty, quarto-sized 230 page book with its seriously-academic dark-blue cover and embossed silver-foiled typographic title that my innate curiosity was awakened.

[Hand drawn mathematical knots by Dowker, below]



The knot paintings

The theoretical, mathematical knots at the heart of these art works are *impossible* knots; they could not exist in reality, one could not *tie* them as a shoelace, for example, they are without end, their path could be followed indefinitely, infinitely. To me these knots have become metaphorical and analogous with the complexities of connections, relationships, of life, love, sex, death. Much of my work is concerned with these *forever questions*; often relating to human interactions, with



ourselves, with each other and with the world around us, ultimately I am fascinated by what makes us uniquely human, what makes us, *us*.

The first works to emerge from this period were my *knot variation* paintings [***How deep is the ocean?*** illus. left] With this body of work I always knew that I wanted to show these abstractions as emotion; to somehow make these two-dimensional representations of knots *connect* with the viewer. And after time the technique started to *impose* itself on my work. In brief, my process involves a many-layered ground of acrylic paints over a thick white gesso base painted/applied gesturally to indicate *deeper knots* buried beneath the final surface, which is often painted, repainted, removed, painted again in many colours to create a rich

tapestry from which I then *scrape out* the knot image. This final part of the process (which is far from successful every time) I refer to as *unpainting*; the knot figures are not *painted* they are *unpainted*, it is a *subtractive* technique rather than an *additive* one, they are *excavated* from the ground to give an impression of depth, a depth of *emotion* in my mind, as I see these images as poetic metaphors for the complexities of relationships, personal and interpersonal, and all that makes us fragile and uniquely *human*. They are all titled after tunes by the legendary jazz saxophonist John Coltrane; the finished paintings, to me, feeling very *jazz*, images *improvised*,

riffed, around a set structural pattern in the manner of creative, progressive musicians improvising around a musical figure or melodic line. The *knot paintings* essentially take a clinical, mathematical notion and make it *relatable* to human emotion and experience with artistic interpretation and the physical intervention of the hand and eye. [**Sweet sapphire blues** illus.right]



The knot sculptures

The sculptures extend and develop this thought into the three-dimensional space and impose themselves on the viewer with a very present physicality. Their scale and *presence* often brings to mind thoughts of corporeality, guts, tubes, innards and the *mechanics* of an organic body. They suggest breath, breathing; a life-force in themselves.



The centrepiece of my last show was a knot sculpture titled **All we ever wanted was everything** [installation view, left] and this iteration included a looped soundscape which was intrinsic to the concept. In some cases the speakers carrying the sound are installed hidden within the tubing of the structure itself and by

playing with the spatial sound mix between the channels it is possible to produce a *conversation* that appears to be happening at different points around the piece adding yet a further element to the work. I am fascinated by the extra dimension that a sound component can bring to a sculptural installation, adding layers of meaning and insight into the core concept.

Some of the knot sculptures are constructed from pure unadorned aluminium and wire ducting; the beauty in the sheer physicality, shape and form of the knot itself providing the focus of thought. However some knots in the series are damaged, cut, slashed, wounds opened, exposing a gory interior which clearly hints at extra level of complexity, an invitation to explore the interior. These are overt invocations of pain, suffering, angst-made-physical. Whether they reflect my own state of mind or are attempting to encourage us to look at *ourselves* in more detail, I am never quite sure; they are, after all, the product of my head and hands.



I feel the knot works are always asking questions and *deliberately* not offering answers; my work never intentionally tries to tell the viewer *what* to think but they do provoke the viewer *to* think.



I also make these works as *transient sculptures* in landscape, where I construct the work *in situ* in various locations. I title them as ***Topological Intervention (land) #1***, for example. They are filmed and photographed when complete and only ever exist *physically* for a matter of minutes. The art being the

performance of the making, the *time-limited existence* of the physical and then the historical document of the film and the photography. The final photographs are presented as direct prints on to aluminium.

And finally, I have also produced entirely *metaphysical* knots using a real-time *light-painting* technique. These knots are the most ephemeral, elusive versions having never *truly* existed at all. I refer to these works as *spectral knots*, evoking an essence of a spirit, of a life, of a *person*?

[The unsaid illus. right]



Future development?

I am currently planning a series of *Topological Intervention* sculptures using existing public statuary and (possibly) museum artefacts. The purpose would be to highlight the complexity of issues often surrounding *politically contentious* objects in public view. The debate surrounding such works is often febrile and impassioned and my sculptural knot *Topological interventions* would be an attempt to promote a wider and more inclusionist investigation of these problematic pieces and subjects; they are in no way to be seen as *apologies* for deeds past (that is the absolutely last thing I believe or would want) but to add a new voice to the conversation and promote a more considered contextualisation of the individuals or objects involved. I do not believe in re-writing history to suit and reflect our present sensibilities, that way lies an *Orwellian* totalitarian future that ignores a history that we *all* have to live with, and make our own peace with, by informed, reasoned thought and appropriate education.

Andy Bullock

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