

# THE RAINBOW

## Box Art Group Newsletter - Wednesday 28<sup>th</sup> June 2023

Written by and for the members of Box Art Group (No. 87)

### Contents

- **Holiday Sketch Book**
- **Symmetry in Art – Break it!**
- **Geese**
- **French Scenes**
- **Seahorse Abstract**
- **Local Events**

### Holiday Sketch Book

After listening to Beth and Roxy's recent 10-minute tutorial on holiday sketching, I was inspired to try a few of the ideas out on my Hurtigruten expedition around Great Britain in May and early June.

I particularly enjoyed making a concertina sketch book and filling it with a memorable moment picture at the end of each day. I made the concertina before I went away. The book covers I made when I got home from pieces of cardboard, painted them with acrylic paint and varnished them.

The other picture is of part of the Titanic Experience building in Belfast, from my sketch book. Such an amazing building.

The equipment I took was sufficient to have plenty of choices... watercolour, acrylic and coloured pencils, self-watering paint brushes, pencils, permanent ink pen, rubber, ruler and pencil sharpener and sketch book. If I had less time, I took a pencil, rubber and sketch book in a small plastic bag. The photograph shows it didn't take up much space and didn't weigh much.

I enjoyed sketching during the holiday, because I didn't have to think about what to take..

Thank you, Beth, and Roxy.

*Lynne*



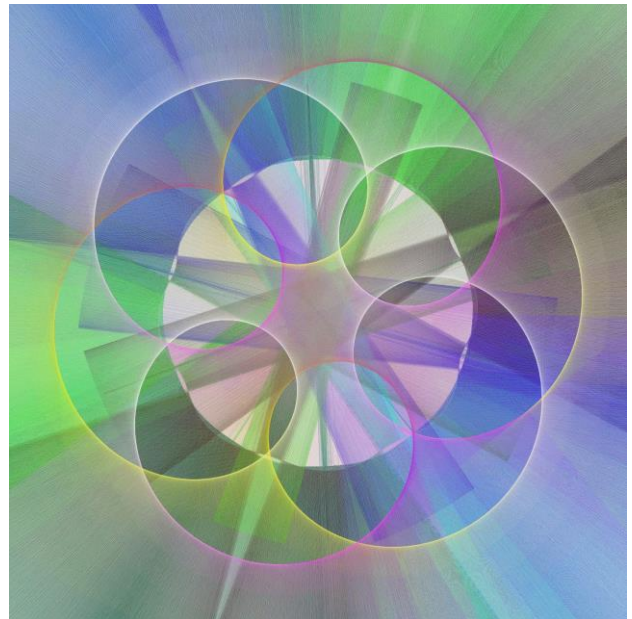
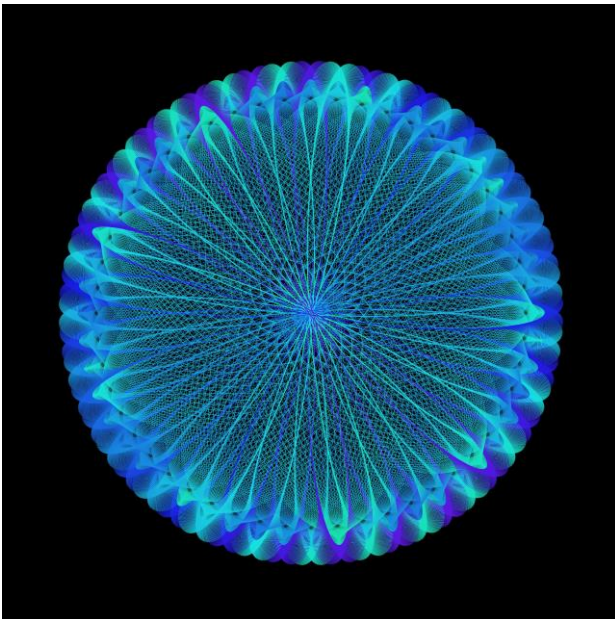
## Symmetry in Art – Break it!

Michael McEllin - All images copyright Michael McEllin.

“Beaker” pots dating from 2500 BCE incised with complex pattern have been excavated in the UK. Egyptian tombs frequently exhibit intricate, repeating freezes. As far back as 14,500 BCE pottery of the Japanese *jomon* culture also show a desire to decorate with reoccurring patterns. There is clearly something in visual regularity which appeals to human minds.

Later Islamic artists - forbidden from representing human forms - developed dazzlingly virtuosic decorative skills - though sometimes with small departures from complete regularity. It has been argued that at least in some cases the deviations seem to be for plausible aesthetic reasons, but also that they are perhaps a deliberate avoidance of challenge to divine perfection. (Close examination, however, sometimes reveal attempts at corrections, and suggest that simple human error may perhaps be a better explanation.) I do not know which of those explanations is correct, but I do understand that broken symmetries are often more visually interesting than perfection.

I have done many experiments with computer generated patterns (see my <http://mcellin.me.uk> website), where it is certainly possible to achieve perfect compliance with some ideal of symmetry. I like, however, to “break” the underlying symmetries in subtle ways that I feel make better art. Here are a couple of examples.



I am not claiming that either is great art - they were selected to make a particular point. I personally prefer the image on the right with its obvious symmetric foundation broken by variations in colour and background. Even the image on the left, however, has subtle variations from exact symmetry which to my taste are better than total perfection. I find that the eye tires of perfect regularity, even if it has initial attractions. You may well disagree, of course.

This, of course, is by no means a new discovery. Fashion designers rarely put their models in completely symmetric clothing: at the very least you will find a tilted hat, or an item of jewellery positioned to one side. In representational art, we very rarely see figures painted or drawn in a pose that shows the full symmetry of the human form. I would argue that much visual interest arises because of the juxtaposition of our mental understanding that the object is intrinsically symmetric, but is presented as non-symmetric.



In landscape art you will not infrequently hear tutors and critics talking about forms that “lead the eye into the picture”, such as tracks, hedgerows or lines of fence posts. We mostly recognise that the best positioning of such features is *not* going straight up the middle of the image. (In fact, you can exploit that type of compositions for its shock value - providing you can avoid the suspicion of merely inept composition.) Even in the real World, the English style of landscape gardening was an intentional departure



Fractal clouds over a fractal landscape (Isle of Skye - the Red Cuillins from Ben Tianavaig)

from the previous formalism in which plants were arranged in symmetric patterns outlined by box hedges. In fact, I think that much of our appreciation of natural landscapes lies in their absence of obvious symmetry, but also, perhaps, because we seem to have an intuitive appreciation of a more subtle kind of symmetry.

We now know that many natural landscapes, especially those which seem to be particularly visually appealing have a so-called “fractal” structure, which looks “un-arranged” but actually conforms to definite underlying rules. We find that we can represent such rules mathematically in such a way that CGI designers working in the film industry can automatically generate completely fabricated scenes of astonishing realism. This turns out to be a more subtle and more general idea of symmetry. Naively we might attribute symmetry to an image if it would look the same in a mirror, or look the same if we turned it around. The key to a deeper understanding is to attribute symmetry to the *operation itself* (rotating, flipping in a mirror etc.) rather than the *result*. Symmetry is really about understanding *changes* that in some sense *leave things the same*. (It does not have to be a pure visual effect: physicists talk about the important symmetry



Fractal Trees on Minchinhampton Common

between matter and anti-matter.) With a fractal the operation is a change of scale: we get essentially the same visual appearance when we examine the object on different length scales. Trees of the same species are different in the exact detail of their branching, but obviously look in some sense similar to each other, and the pattern looks in some sense similar whether we are looking at a large branch or a small twig. Different species do however look obviously different in their pattern of branchings because they follow a different fractal rule.

The borders of cumulus clouds look the same on all scales and one cloud is much like another, and the exact shape of a coast line may have similarities whether you examine it on kilometre scales or meter scales. Artists intuitively learned these tricks long ago: old master paintings are full of convincingly imagined landscapes.

I rarely draw any real tree with an attempt at exact reproduction of its branches - but I hope that my oak trees still look different to my beech trees, and indeed are recognisable as the original species, because all oak trees seem to us to share some visual similarities that are not at some level shared with beeches. So, for example, the four trees in the photo are clearly growing and dividing according to different intrinsic rules. I hope that my three tree drawings capture the essential differences between these specimens. My painted clouds may not look exactly as they might in a photograph taken at one particular time - but I hope that I invent a fractal structure that represents the type of cloudscapes which were then moving across the sky.

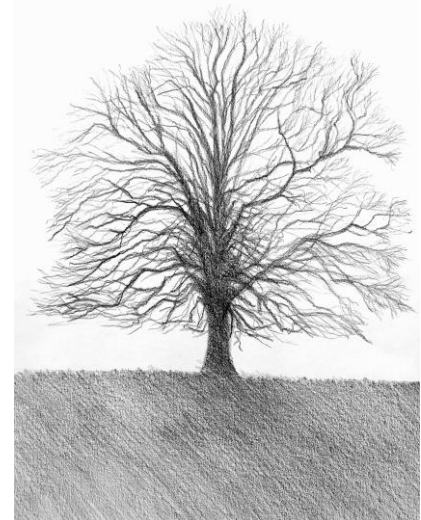
I would not be surprised to find evolved to make particular we constantly find all around us. creature that must recognise trees, and have a need to saying about weather changes, recognition of their underlying the case that careful analysis of constructed images, such as show that artists can structures. We clearly have fractal geometry and good it.



that our visual systems have sense of fractal structures that It would make sense for a various types of plants and understand what the sky was would develop an intuitive fractal geometries. It is certainly apparently randomly those from Jackson Pollock, consistently hit the same fractal some built-in intuitive grasp of artists seem to be able to exploit



Perhaps you may have wondered, after reading Lewis Carroll, whether Alice's "Through the Looking Glass" world - everything swapped for its mirror image - could really be different to our real world. It turns out that Carroll's fantasy had more truth than he realised: much of our biochemistry is asymmetric (Alice behind the looking glass would get wrong-handed amino acids from her food and her health may suffer) but even at a much more fundamental



level right-hand physics differs from left-hand physics in subtle but crucial respects: the law governing radioactive decay has a left hand twist - the experiments in the mirror would work differently!

This was a great surprise at the time it was discovered back in the 1950s - but if you also swap matter for anti-matter you restore symmetry....almost. On the face of it, the fundamental physical laws suggests that matter and anti-matter *should* be created in *exactly* equal proportions at the beginning of time - and later cancel out each other leaving only radiation. It turns out, however, that there was a one-in-a-billion imbalance, leaving just enough normal matter to make everything we see around us. We have as yet only the most speculative explanations about why creation itself departs from exact symmetrical perfection, but

we would not be here to worry about it if it were not so. We find such very slight breaches of perfect symmetry even more intriguing and difficult to explain than the completely consistent “left-handed is not the same as right-handed” experiments (which we do now understand).

So, why not get some symmetry into your art - then break it! (But with subtlety.) The Universe likes symmetry, as long as it is not quite perfect: that is the secret of creation.

*Michael*

### **Geese**

This painting is based on a Peter Scott print, in acrylic on linen. Rather than painting around the sides to keep them tidy, I've just painted a white border which also covers the sides as suggested by Beth. I did wonder that if I sign it with my initials, it might be worth something... I might have another go at the scene, toning down the blue of the sky – the original had plenty of yellow/grey clouds, and my geese are smaller.

*Pete*



### **French Scenes**

These were painted during holidays in France, some time ago. Chateau de La Verie, Challans, Traditional *mas* or farmhouse in Provence, and Chapel in Provence, miles from anywhere.

*Hilary*







### **Seahorse abstract**

In watercolour by Richard Baker

During my last painting of seahorses, I really enjoyed painting the panels that make up the exoskeletons, so I decided that next, I'd make up an abstract image consisting of just those panels. While I'm happy with the drawing, I'm not so sure about the colour scheme – it's really too bright and looks more like a colour chart than anything from the natural world. Still, it's an abstract, so it can't be 'wrong'!

*Richard*

Editor's note: I thought this was fascinating, partly for the subtle variation in colour along the length of the panels, and also for the 3-dimensional effect in each panel, which is enhanced by the spines and the shadows of the spines. Pete

### **Local Exhibitions**

Museum in the Park

90th Anniversary Exhibition of the Gloucestershire Guild of Craftsmen 1933 – 2023

Saturday 17 June – Sunday 16 July 2023